

Athlone Press may be sold

By Judith Judd
London University's Athlone Press, which publishes academic books which might not otherwise find an outlet, should be sold to a commercial publisher, according to a report prepared for the university.

Mr A. K. L. Stephenson, a financial expert, says in the report that the university has made the final decision. "After I am bound to say that the opportunity which appears to be available to hand over the press to Routledge & Kegan Paul has turned out to be extremely attractive," he says.

The second alternative would be to keep the press as part of the university. However, Mr Stephenson emphasises the need to ensure proper management and financial con-

trials should this happen. This, in my opinion, requires the complete restructuring of the management of the press into a board of directors operating as a separate company with specific commercial objectives," he says. This would need an injection of £400,000 into the press, says the report. In an earlier draft Mr Stephenson said only £100,000 would be needed.

The university is at present subsidising the press by about £30,000 a year and its closure was suggested by the joint committee of the court and senate for collective planning, though Convocation voted overwhelmingly against closure.

The report will be studied by the press's board of management, and the chairman, Dr John Black, along

with Mr Stephenson, will be asked to meet the joint committee. The committee will report to the court and senate.

Proposals are also being considered by another publisher, the Bennet Corporation (Scolar Press).

The report says that both sets of proposals would provide a basis for negotiations which would be likely to lead to the university being relieved of its obligations over the press while safeguarding the interests of the staff and authors.

Staff at the press feel the report has been written within too strict a financial brief and that it has not fully considered the different aims of university and commercial publishers.

Cambridge to keep checks on junior posts

Academics at Cambridge voted by a narrow majority this week to retain the university's system of limited tenure for assistant lecturers and demonstrators. The vote was 304 to 295, a majority of nine.

Members of the Cambridge Association of University Teachers had been trying to change the system for three years because they claim the terms of employment put them in a worse position than any other university.

At present assistant lecturers and demonstrators are appointed for a maximum period of 10 years compared with the system in other universities where they have the right to tenure subject to three years' probation.

The CAUT claims that the present system amounts to "five years of underpaid training for the job." In a memorandum on the subject it argues that the university favours the present system because it provides cheap labour.

"The increasingly grave and evident drawbacks of the system are not lost on potential university assistant lecturers and demonstrators, and while the present job tenure ensures a sufficiency of adequate applicants, we see increasing signs of the best young academics preferring more secure jobs in the United Kingdom or better-paid jobs abroad."

The present system thus seems to us to work increasingly against the university's interest in recruiting its share of the best available research and teaching staff," say the teachers.

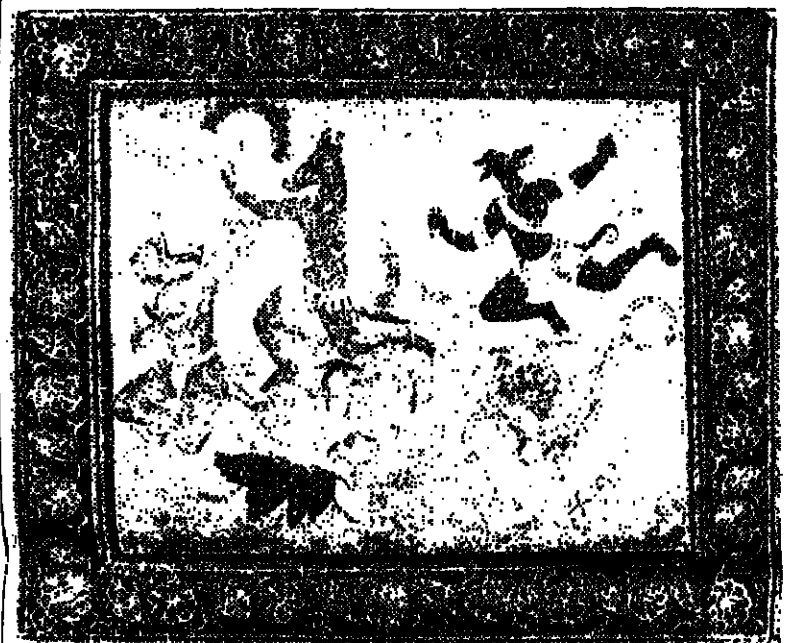
The general board of the faculties has proposed an amendment to allow appointments to be made for three years, with an option of a further two years, and has also called for more flexible policy on temporary appointments. But it is generally in favour of retaining the five-year maximum.

The board says there is no shortage of well-qualified candidates and says it has no evidence that assistant lecturers who are not kept on find difficulty in getting work elsewhere.

The present system, according to the general board, "provides the university with an invaluable source of new and changing ideas and provides academic training at the highest levels."

NEXT WEEK

Interview with Dr Edward Norman, this year's Reith Lecturer.
Robin McKie talks to Professor Geoffrey Allen, chairman of the Science Research Council.
Is the CNAA overstepping the mark?
UNESCO, Study-Service and Information Exchange.
Donald MacRae reviews John Diggins's book on Thorstein Veblen.
Four pages of books from University Presses.



Jina musicians and dancers in the sky—from an exhibition of myth and ceremony in Islamic art at the British Museum until January 14.

Tories launch six-point charter for exam reform

By Maggie Richards

A Conservative charter containing six guiding principles for the reform of the 16-plus examination system was outlined yesterday by Mr Norman St John-Stevens, Opposition spokesman on education.

He was replying to the Government's proposals, published earlier this week, for a single system to replace the GCE O level and CSE examinations.

Mr St John-Stevens condemned the White Paper as "inadequate and dangerous". The proposals were based on ideological and egalitarian sentiments, rather than on practical and educational principles.

Conservatives did not oppose reform. They recognised that there was considerable scope for improvement, but believed this should be accomplished by evolution, and not by revolution.

Speaking at Coventry, Mr St John-Stevens said the existing system should be maintained.

● A single system should emerge gradually from the necessary research and field work.

● Initially, the number of examination boards should be reduced by regional grouping.

● The shortcomings of the present CSE examinations were recognized. A common grading system should be adopted, and teacher-assessed syllabuses aligned to strict national criteria.

● Existing examinations entered only for the top 60 per cent of the ability range. There was a need for school leaving certificates profiling the record of pupils leaving school without qualifications.

● A levels were indissolubly linked to O levels and must be retained to preserve high university standards. Introduction of the proposed N and F levels would lead to demands for four-year university courses, costing £1,000.

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Lecturers' pay scale merger rejected

By David Jobbins

The demand for a merger between the two lowest pay scales for college lecturers was effectively rejected this week.

But the final verdict on the interim claim submitted by the National Association of Teachers in Further and Higher Education will not be given until a further meeting on November 17.

The claim, which arose from a conference defeat for the union executive last June, is for the merger of the lecturer 1 and lecturer 2 scales into one grade ranging from £3,192 to £6,658.

The management panel of the Burnham FE committee told NATFHE's negotiators that lecturer 1 already constituted a lengthy career scale.

But this was disputed by the union, which said that in practice only a few young and inexperienced people join at the lower end of the scale: most joined half-way up.

NATFHE is also disturbed at the loss of 12,000 lecturers at the top of the lower scale with little hope of promotion.

NATFHE also wanted the management about growing recruitment problems, particularly in engineering and television servicing, where qualified staff can earn far more working at their trades rather than teaching.

The employers disputed the union's contention that further education college lecturers' salaries were out of line with sixth form college salaries, nor did they accept their conditions in colleges were less favourable than in schools.

The union executive will be considering what type of strategy to be appropriate when the final outcome is known. Union members had expected a firm decision to emerge from Monday's meeting, which was lobbied by about 20 people supporting the claim.

Poets at the starting post

By Ngain Crequer

Papal Conclaves, intelligent aliens from space, and the Loch Ness monster are easy bets for bookmakers but the election for the Professorship of Poetry at Oxford University has got them foxed.

The late surge of interest with a field now stretched to nine declared runners has so bemused the bookmakers that they do not know whether they can open a book.

Mr Ron Pollard, a Ladbrokes spokesman, said: "In July it was quite simple, when there was only John Jones, and the possibility of Kingsley Amis. But there are eight runners now and I do not know the potential of any of them."

The eight candidates are: Mr H. J. F. Jones, Fellow of Merion College, who has been nominated by 214 members of the university; including several college heads; Mr P. C. T. Levi, Fellow of St Catherine's, nominated by 68 members of the university; Professor D. A. Davis, Olive H. Palmer, Fellow of St John's, and the University, California, nominated by 34 members of the university; Mr Nigel Andrew Silver, Frith, St Catherine's College; Mr Ronald Duncan, poet and playwright; Mr Francis Warner, Fellow of St Peter's College; Mrs Juliet Mary Gowan, of Lady Margaret Hall; and Mr John Sparrow, Fellow of All Souls College and New College, and former warden of All Souls.

For the past five years the job has been held by John Wain, poet and novelist. The salary is £10,795 a year and the only duty is to give one lecture each term during the period of office. He is the only professor within the university entitled to hold more than one professorship.

At the end of the Convocation, effective October 1, 1979, the election will be held. The vote can be cast by ballot or by secret ballot. Voting is on November 2 and 4.

Grants plan to be scrapped

By John O'Leary

Proposals for a new system of mandatory grants for 16 to 19-year-old school and further education students seemed certain to be rejected yesterday as the Cabinet met to finalise the contents of the Queen's Speech.

The scheme for mandatory grants of up to £7.50 a week was considered too expensive—it would cost about £100m a year despite previous Government support of £40m—had already been rejected by the Conservative-controlled local authority associations.

An alternative scheme was expected to be substituted, offering a lower level of central funding, leaving individual authorities to decide whether to give grants. Such a system would not necessarily be included in the Queen's Speech and Wednesday since it could be implemented without fresh legislation.

The proposed mandatory system, which was announced in May, had received strong backing from Mr Williams, Secretary of State for Education. Only a fortnight ago he told local authority representatives that it would be included in the Government's programme of legislation.

The National Union of Students wrote to the Cabinet in a full effort to rescue the scheme. Trevor Phillips, NUS president, said in the letter: "We feel betrayed. If the Cabinet rejects 16-19 grants, hundreds of thousands of students will be bitterly hostile to the Government."

He said that the union would be launching a "massive" campaign next week to secure the grant and was seeking the support of parents and trade unionists. The campaign will begin on Monday with two weeks of local action, building up to a national day of action in London.

Polys seek inquiry

Polytechnic directors are to call on the Council for National Academic Awards to conduct an inquiry into the handling of the 1974 quinquennial awards.

The Committee of Directors of Polytechnics decided to call for a inquiry last week. It follows a report by the Secretary of State to the House of Commons on the 1974 quinquennial awards.

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AUT to demand 25 per cent rise

By Ngain Crequer

Association of University Teachers will ask salary increases of around 25 per cent this year but it is awaiting the outcome of other sector pay fights before submitting its claim.

The association and the University Authorities have drawn up a report which shows a 25 per cent rise in salaries since the last arbitration award. The Department of Education and Science is now considering the report, which is based on the index of average earnings relative to other indices such as the Retail Price Index.

The AUT is waiting for the DES reaction before it makes its normal October claim. It supports the TUC line on pay, which is based on a firm decision to bargain collectively, but unless there is an emergency affecting pay, our claim will be formulated in December.

The first instalment of the rectification salaries was paid with effect from October and the figures will be revised when negotiations are complete for the normal 1978 settlement.

The AUT agreed at its May council that it would aim to make up the erosion of academic

about falling staff-student ratios and the fact that lecturers' hours and workload have steadily increased.

Mr John Akker, deputy general secretary of the AUT, said this week: "The pay situation affecting the country is fluid. There are still talks going on between the TUC and the Government and nobody can anticipate what will become of them."

The Government might be defeated very early on and this could lead either to a new Labour government with a different policy or a Conservative government. Or it could be that the present Government will continue, with a general election later on.

"We do not know how the public sector will be dealt with. We are unclear about the general situation, but unless there is an emergency affecting pay, our claim will be formulated in December."

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CNAA urged to set up inquiry

By Peter Davis

The Council for National Academic Awards will decide at a meeting tomorrow whether to set up an inquiry into the handling of the 1974 quinquennial awards.

The request to the CNAA follows an unsuccessful bid by the Committee of Directors of Polytechnics to bring the Secretary of State into the dispute between the directors and the council. Officials at the Department of Education and Science ruled that it had no jurisdiction over the affairs of a church body.

Not the strength of the directors' case, and their loss of confidence in CNAA procedures, is that in a series of confidential meetings held before the CDP at a recent meeting in London. A document summarizing the views of 131 directors accuses CNAA of "incompetence and inconsistency."

The quinquennial visits were unprofessional in character, often marked by negative attitudes and a lack of interest in the growth points or potential of the institutions.

The document doubts whether the time and effort spent preparing for the visits is rewarded by the "very brief" visit and says that the visits are often a waste of time and money.

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Stagnation crisis in laboratories

By Robin McKie

Science Correspondent

A confidential report has revealed that staff stagnation in British university chemistry departments is now reaching crisis levels. And the generally accepted view is that the stagnation is being caused by the publication of the annual report of the European Science Foundation which stresses that research units throughout Europe are having increasing difficulty in recruiting young scientists.

The first report was prepared by a working party of the committee of heads of chemistry departments. It shows that the average age for a chemistry professor is 52; a reader 49; and a senior lecturer 47. Given the distribution of age around these averages, it means that there is a little chance of any staff movement for another 15 years—when all senior staff will retire within a year of two of each other.

When this happens, a flood of young researchers will enter universities to take up the senior posts and the 25-year cycle of stagnation will repeat itself.

The problem has been caused first by the Robbins expansion of universities when new departments were created and were manned at senior levels with young scientists.

In the past three or four years, economic recession has ended the creation of additional posts, and the age distribution has been frozen.

The extent of the crisis has not been quantified until the preparation of the chemistry report. The report shows that virtually no chemistry has been appointed to lecture-ships in the past eight or nine years.

Professor Les Hough, chairman of the committee, said the problem was now very serious. "These figures indicate the urgency of the situation. There is already an eight-year gap at the bottom end of the market which means that a quarter of the useful lives of young lecturers have already been wasted."

"We are losing the impetus provided by bright young people coming into the profession both in teaching and in research."

Although the age distribution problem is known to be significantly worse for chemistry departments, other disciplines affected include physics, applied sciences and some engineering departments. The crisis also has serious implications for the British chemical industry, which

has been working on more stringent tests.



The Queen with Dr Gordon Huell, when he presented her with a copy of his book King's College, London 1828-1978, a history commemorating the 150th anniversary of the college's foundation at a reception to mark the event.

Psychic pin-up on Other Side

Pin-up boy of the spiritualist world, Professor John Taylor, seems set to lose his popularity in psychic circles.

In this week's *Nature*, Professor Taylor—who was once named Scientist of the Year by the *Psychic News*—has published an article which states that recent tests have now revealed no paranormal events that cannot be explained in normal physical terms.

In his 1975 book, *Superminds*, which included investigations of spoon-bending champion Uri Geller, Professor Taylor suggested that metal-bending was caused by long-wavelength fields emitted by the human body. Telepathy, ghosts, poltergeists and many other run-of-the-mill paranormal phenomena could be explained in a similar way.

Predictably, the hypothesis was not exactly a rave with established scientific bodies who attacked the loose methodology of the investigations—and since then, Professor Taylor, of the department of mathematics at King's College, London,

has been working on more stringent tests.

Together with Dr E. Balnqvist, also of King's College, he used a battery of sophisticated devices including electromagnetic detectors, video tape recorders and skin electrodes. Tests were carried out on people who claimed powers of metal-bending, dowsing, telekinesis and psychic healing.

Under the new severe conditions, not a single paranormal event was observed and there was no evidence of any electromagnetic emanations. Dowsing could be explained as subconscious muscular twitches, foith healing was a purely psychological event and there was no sign at all of any spoon-bending or telekinesis.

Professor Taylor told *The THES* that he had perhaps been a little premature in suggesting the electromagnetic hypothesis but it had been part of his investigations. "Many physicists publish papers that are wrong later."



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Professional proliferation

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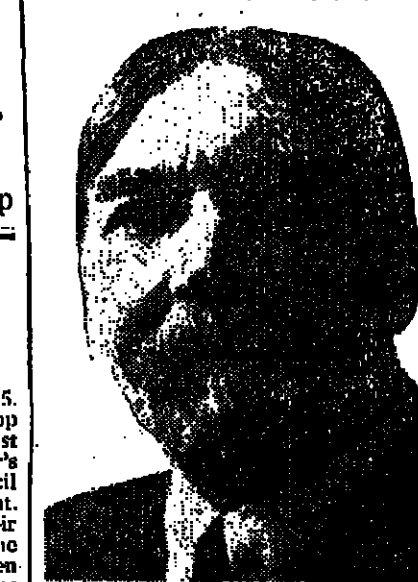
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Safety standards under attack

by Robin McKie
Science Correspondent

Universities and polytechnics have been attacked for their implementation of the Health and Safety at Work Act. A study, carried out at Manchester Business School, has revealed that higher education institutions have not introduced proper curriculum changes to make students aware of the industrial impact of the Act and accuse the centres of narrow and defensive attitudes to health and safety.

The researchers' report, published in a recent issue of *Chemistry and Industry*, states that the Health and Safety at Work Act did not appear to have produced sufficient stimulus to cause syllabus changes. "Presumably the consequences of the Act for industry have not filtered through to educational circles," says Jeff Butler, Derrick Hall, and Alan Pearson, from the business schools' R and D research unit.

Their study concentrates on questionnaires sent to higher education institutions in 1976 and again earlier this year. Only chemistry and chemical engineering departments were contacted. From responses they concluded that institutions with health and safety content were doing little to improve matters. And they added that there had been little change in attitude between the two years of the surveys.

They warn that although reputation in gain competence is widely accepted for laboratory practical work, the need for practice in dealing with simple incidents is widely ignored. "The belief that one needs to practise the use of a burette to achieve competence whereas one can use a fire extinguisher correctly first time seems widespread," they add.

The study concludes that serious consideration needs to be given to health and safety and that more attention should be paid to it in the education of scientists and technologists.

And a separate study has revealed that there is also a general

lack of awareness of the hazard from ultra-violet radiation among university staff and also of health protection measures. This is the conclusion of a National Radiological Board team who investigated ultra-violet radiation hazards in university departments of chemistry, textile science, geology, biochemistry, biology, medicine, printing, forensic science and mechanical engineering.

Ultra-violet radiation is used for a number of purposes in laboratories, including sterilization, and a total of 55 sources were examined. Of these the team found that 24 were considered to be in high-risk categories. Only two had adequate warning signs and in only three cases was appropriate adequate protection worn.

The report concludes that in general the standard of engineering controls was inadequate, administrative controls were poor and although personal protection was available in some cases, there were no warning signs instructing staff to wear it.

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Technician shortage forces workshops to close

by David Jobbins

An education authority's refusal to allow Leeds Polytechnic to employ more technicians has led to the closure of four mechanical engineering workshops on safety grounds.

The closure was ordered by the head of the mechanical engineering department, Dr Robert Schofield. He had to choose between keeping a limited number running "something like efficiently"—and keeping all 14 open with inadequate supervision for students handling potentially lethal equipment.

Dr Schofield says that to bear comparison with other polytechnics he should have 20 technicians. But the establishment approved by the local authority is only 10—and this has been made worse because two posts are vacant.

"We are worse off than Teesside," he commented. "The impossible thing is to get the local authority to accept we need more technicians."

Equipment in the workshops includes heavy machinery and presses, and students need supervision by qualified people. To leave all of them open would be "criminal," Dr Schofield says.

The result is that the 400, or so full-time equivalent students in the department—120 on full-time degrees courses—are not getting the level of laboratory work intended for the course they are on.

When the degree was validated by the Council for National Academic Awards, under-provision of technicians was the major criticism. Dr Schofield says a shortage of technicians throughout the polytechnics was one of the CNA's findings during its quinquennial visit 18 months ago. But the local authority's response during the year was to "blatantly" resolve the problem was "bland," according to Dr Schofield.

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No action on student fees

No steps will be taken by the Government to prevent Trafford Education authority charging fees of £1,500 to some overseas students, Mr Gordon Oakes, Minister of State for Higher Education, has told the National Union of Students.

In a letter to Mr Trevor Phillips, NUS president, Mr Oakes reveals that special arrangements were approved by Mrs Williams, the Secretary of State, to allow students at North and South Trafford Colleges to be charged the full cost of tuition. This, he says, is in line with a long-standing policy regarding overseas students.

Mr Oakes assures the union that it does not follow that approval would be given in identical terms elsewhere, since local circumstances would always be considered. But his response to the NUS plea for intervention did not satisfy the students, who have now called a national demonstration next month in Trafford to protest at alleged Government discrimination against overseas students.

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Churchmen support Model E

by Bert Lodge

It would be foolish to spend money on providing up to 50,000 new places in higher education by the mid-1980s while leaving the existing resources of the voluntary colleges untouched, says the General Synod of Education in its response to the Government's consultative document, "Higher Education into the 1990s."

"Speaking from the background of experience of the voluntary colleges we would claim that it is possible to achieve high quality educational provision at less cost than the present national average, at least in terms of recurrent costs," says the board.

It observes that the higher education system as it now operates illustrates only too well the biblical proverb that "to those who have, shall be added, but points out that the concept of education as a Christian body, is particularly with the underprivileged and disadvantaged.

"In view of this it would be quite inadequate if the only steps taken were ones to encourage more people to enter higher education as traditionally conceived."

Not surprisingly this leads the board to support a higher education system in which women and older people, many on short vocational courses, will figure more. This is Model E, one of five possibilities suggested by the Government document as a way of coping with the fall-off in the traditional entrants to higher education expected in the 1990s.

But warns the board, it will first be necessary to break down the existing boundaries between the higher and further education systems. The present divisions inhibit the development of new courses as precisely the point where they will be needed in the words of the document, "participation on a broader social basis" is to be effective from the mid-1990s.

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Henry Moore on a visit to East Anglia University last week to choose a site for his sculpture Two Piece Reclining Figure No 3 which is to be loaned to the university by the Tate Gallery.

Junior staff need more chance of promotion, says survey

by Owen Surridge

Drastic changes are urgently needed in promotion arrangements for teachers in further education, according to the results of a survey carried out by Dr Judith Bradley of the National Foundation for Educational Research.

Reporting her findings at the foundation's annual conference, in London last week, Dr Bradley said that frustration was breeding resentment among junior staff and the push for favour or neglect or abandonment of non-academic courses.

High academic qualifications more than doubled teachers' chances of promotion to senior lecturer status but professional qualifications were of little help. At the beginning of the 1970s, trained teachers in further education were less well off in the promotion stakes than their university colleagues. That was being corrected and there were indications that training would be more highly regarded in future.

Mobility was an asset and lack of it, along with lower academic qualifications, was a marked stumbling block, particularly for women. Another disadvantage for women was their lack of qualifications which they had been traditionally discouraged from entering.

Teachers were divided in their assessment of the important factors in getting promotion. Junior staff set great store on luck, conformity with the views of senior staff and the chance to draw up new courses. Heads of departments, on the other hand, regarded teaching ability, concern for individual students and

ability to get on with other staff as the essential criteria. Principals rejected the view, widely believed, that promotion depended more on whom one knew rather than what one knew.

A lot of teachers did not understand the promotion system and they rated chances of promotion pessimistically. A third of the teachers questioned saw no hope of promotion in the next 10 years and more than half believed they would reach the level they thought they deserved. Eight per cent were contemplating leaving further education.

Mr A. W. S. Hutchings, chairman of the NFER, told the meeting that the foundation would be unable to start new research projects during the next financial year owing to cuts in revenue from local authorities. The NFER usually receives start around six projects a year, although the number varied according to cost.

Dr Bruce Choppin, of the NFER, told the meeting there were now six sixth-form colleges in the country of them apart from secondary schools, although governed by school regulations. There were no tertiary colleges run under further education regulations; these were more popular with students who were happier. Sixth-form facilities were less satisfactory in grammar schools, as was the standard of careers advice, but the NFER was looking for GCE A level students similar to sixth-formers in types of setting.

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Emergency NUS conference over finance

by Peter David

A new package of proposals for re-organising the Government's multi-million pound payments to student unions is to be unveiled by the National Union of Students at an emergency conference in December.

The NUS plan, endorsed by its executive last week, will be presented to a response to an alternative Department of Education and Science scheme published in May. The DES proposals were initially welcomed by NUS leaders, but ran into strong opposition from its membership.

Under the new NUS scheme, a national body of students and paying authorities would negotiate terms for student union fees, which would be varied according to individual institutions by local committees.

At present, union subscriptions are paid automatically by local authorities as part of the student grant, with the subscription level agreed annually by the individual university or college. The DES wants to place this with a "two-party" scheme restricting the local authority subscription to a maximum of £15 per student, and leaving it to colleges to top-up the fees from their own funds.

But many students are afraid that this will bring unions into unequal competition with academics for college funds. The latest NUS proposals are designed to ensure that the bulk of student union money is supplied by central government.

The proposals envisage a national negotiating body, split equally between students and paying authorities, which would negotiate fees, which would negotiate fee

norms for students in each sector and lay down minimum requirements for the facilities and resources available to unions. Each year it would negotiate a minimum percentage rise for fees.

These fees would be paid in the normal way through student grants, but all payments within the nationally agreed norms would be 90 per cent refundable from central government. Unions which want bigger payments than the norm will have to convince local committees set up for each college and consisting of representatives of students, college staff and the local education authority.

If the local committee agrees to the extra payment, and can win agreement from the central body as well, the additional money will also be paid through the student

grant and will be refundable. But if the local committee is unable to persuade the central body of the case for extra, it will have to be paid out of the college's funds.

Mr Trevor Phillips, NUS president, said this week that the proposals would introduce an element of local bargaining and make student unions accountable for their use of government money. But it would reduce the uncertainty entailed in the DES proposals.

The emergency conference was forced on the NUS leadership by a request from only 10 out of more than 700 constituent organizations. If it approves the new proposals they will not become official NUS policy until the union's regular biennial conference, only five days later.

Durham merger scheme faces postponement

by John O'Leary

Fears are growing that the proposed merger of Durham University with the nearby College of St Bede and St Beke will not take place next year as planned. Protracted negotiations over funding have delayed approval to the point that amalgamation may have to be postponed.

An appeal has been made to the University Grants Committee to give its decision before Christmas because both parties fear that further delays could make the present timetable unworkable. Considerable planning remains to be done at a local level and it is feared that recruitment for the new BEd course would be seriously impaired if a firm decision is not made by then.

A spokesman for the UGC admitted that it was possible that the proposed date of September 1979, would have to be put back. If negotiations were drawn out, although this was still the target for the merger, while it is agreed that a decision might be given by the end of the year, it depended upon a satisfactory conclusion to local and national talks.

Should the merger be postponed, the college will have to apply to the Department of Education and Science for a further year's funding, despite the fact that it has been officially designated as a closing.

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Major expansion of TOPS courses proposed in report

Recommendations for a large scale expansion of the TOPS scheme with further implications for colleges of further education are likely to be forwarded in a Manpower Services Commission Report next month.

Proposals contained in a discussion document include a substantial increase in TOPS involvement in higher level technician training and grants to colleges of further education for the provision of extra facilities to cope with increasing

other training sectors such as the Industrial Training Boards and the further education service. This would increase the speed and efficiency with which the needs of employers for skilled labour were identified.

Expansion in higher level technician training is seen as necessary because of the overall scale of requirements needed to train maintenance and service technicians, test technicians, as well as design draughtsmen and computer staff.

This would mean an estimated increase from the present intake of 6,900 to 14,000 trainees by 1985-86 with the gross cost doubling from £1.6m to £4.6m.

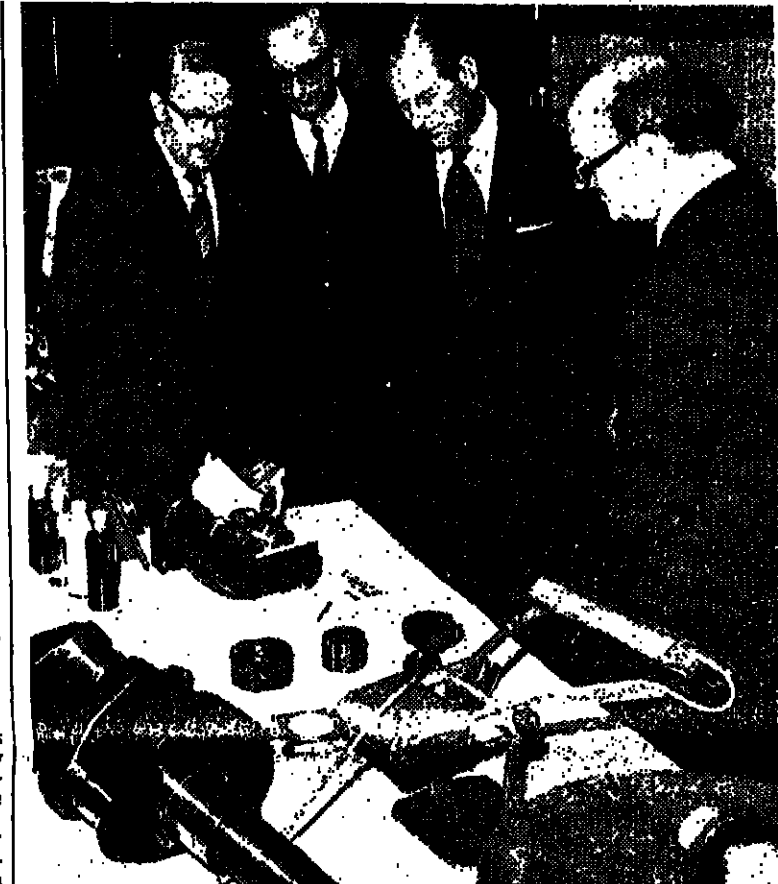
Other areas of occupational training in which TOPS would extend provision are the clerical and commercial fields, previously radically cut back, and catering, health and social services occupations at present stand outside TOPS provision but the document suggests relaxing the rules which cover this.

In addition TOPS plan to expand its areas where local education authorities are not providing or cannot meet the demand for second year garage courses for ethnic minorities.

The National Association of Teachers in Further and Higher Education believes that a number of recommendations made in the discussion document, if they were implemented, would have clear implications for the further extension of TOPS activities in technician education.

Any further expansion of TOPS in this area, especially at higher technical level, might not only have implications for the further education sector but also for the training system as a whole.

TOPS scheme should be independent but complete the training system and its relationship with



The Duke of Edinburgh on a visit to Leeds University's tribology unit in the department of mechanical engineering last week. With him are Dr R. J. Winkler, director of the unit (second left) and Dr C. N. March and Mr R. N. Rhodes.

London polys hope for cash increase

by David Jobbins

Administrators of inner London's five polytechnics are more hopeful than in any recent year that the Inner London Education Authority might sanction an increase in finance for 1979/80.

Their optimism after meeting ILEA officers follows years of cuts and no-growth policies.

But whether their reading of the response by ILEA officers to the polytechnics' demands will be carried into effect

RESEARCH

Some fishy business to tame Africa's sexy fish

by Peter David

The exciting sex life of an African freshwater fish has so incensed the Ministry of Overseas Development that it is allocating nearly £130,000 for a Stirling University research project that will turn the creature into a sexless vegetable, high in protein but low in libido.

Tilapia fish are, the ODM says, among the most important freshwater fish protein sources in Africa. There are more than 100 varieties and if they were farmed they would become important earners of foreign currency. They could even find their way to English menus.

But the trouble with Tilapia, which are perch-like members of the cichlid family, is that they are sexually precocious and highly promiscuous. This is in spite of their bad looks (they are distinguishable from other spiny fishes by having a single nostril on each side of their head).

What they lack in aesthetic qualities, however, they make up for in enthusiasm. The fish breed actively and indiscriminately once they reach sexual maturity, which is when they are only half-grown. In itself, the ODM says, this is no problem—except for the fact that in the case of the Tilapia breeding starts growth.

The males are unaffected, and grow to a couple of kilos in weight when they are a year old. The females, on the other hand, start breeding at the age of eight weeks, when they are only a few inches long, and hardly ever grow bigger. This means they tend to be gobbling up by passing comorants and Nankere fish, reducing the stock available for hungry Africans.

The ODM's solution to all this is brilliant but chilling. "Commercial considerations," the Ministry blandly states, "require that all fry should become male." To this end it will finance the building of a prototype hatchery at Stirling, where fish can be reared and hormonally treated.

Research at the hatchery will aim to produce the largest possible numbers of Tilapia, including the use of artificial insemination. Stirling has already pioneered a method of sex reversal of females at birth, ensuring that only males are produced.

The ODM justifies the creation of these finless fish communities by pointing out the economic benefits of producing strains which grow better under domestic conditions than in the wild. The Stirling technique will eventually be suitable for use by developing countries.

The research will be conducted at the university's unit of aquatic pathology under Dr. Ronald Roberts and Dr. J. F. Muir.

NATIONAL COUNCIL for DRAMA TRAINING

Announcement of Accreditation Procedures

The National Council for Drama Training (NCDT) is an independent body which exists to promote the highest possible standards of professional training for drama. It was set up in 1976 as a result of the report 'Going on the Stage' (an inquiry into professional training for drama) published by the Caine-Gubbenkin Foundation. The NCDT is composed of members from British Actors' Equity Association, employers' organisations in theatre, television, and radio, and the Conference of Drama Schools. Organisations sending observers to meetings of the NCDT include the Department of Education and Science, the local authority associations, the Arts Council of Great Britain, the Council for National Academic Awards, the Drama and Theatre Education Council, the Association of British Theatre Technicians and the Association of Drama School Students.

The NCDT will shortly be considering applications for the accreditation of acting courses at qualifying drama schools. NCDT accreditation, when granted, will have important implications for both drama students and drama schools in the following areas:

maintenance of high standards of training
student grants
link with the acting profession
entry into the profession

The granting of NCDT accreditation will be a two-stage process. First, drama schools must meet certain criteria in order to qualify for an accreditation visit. Then they will be visited by a group of assessors drawn from the NCDT's Accreditation Panel, on which all branches of the profession are represented. The Chairman of the Accreditation Panel is Mr. John Allen, until recently Principal of the Central School of Speech and Drama and formerly HM Inspector of Schools, with special responsibility for drama; the Vice-Chairman is Mr. John Farnham, one of the Equity representatives on the NCDT and at one time Principal of RADA. When all drama schools which meet the qualifying criteria and which apply for accreditation have been visited, the NCDT (on the advice of the Accreditation Panel) will publish a list of those acting courses which qualify for NCDT accreditation. Accreditation visits will commence early in 1979 and it is expected that the NCDT will be in a position to publish its first list of accredited courses by the end of 1980.

All drama schools or schools of theatre wishing to apply for NCDT accreditation should make application to the Secretary, National Council for Drama Training, 5 Tavistock Place, London WC1H 9BS by December 31st 1978. Details of the qualifying criteria for consideration for accreditation will be sent on request.

Europe plans climate research

by Robin McKie
Science Correspondent

The EEC is considering an ambitious £5.4m five-year research programme on climatology which would begin next year. The project would aim at providing greater understanding of the forces that influence climate and how change in the short or long term can be predicted.

The European Commission has proposed the scheme to the Council of Ministers, and has stressed that the work would be linked with other research, including projects carried out by the World Meteorological Organization and the global atmospheric research programme sponsored by the International Council of Scientific Unions.

The commission argues that present day society is more vulnerable than in the past because climatic changes can have dramatic

effects on limited food and water resources. This allows little or no safety margin to a steadily increasing world population and to an expanding industrial system.

There is the further Catch 22 that greater industrialization, with its pollution and high consumption of fuels, may itself have an important influence on climatic behaviour, a commission report states.

It points out that increased carbon dioxide in the atmosphere, caused by increased use of oil and coal, could lead to a rise in the Earth's temperature and the melting of polar ice caps. Thermal pollution from nuclear energy may also prove to be a problem.

The proposed EEC research programme, which would be reviewed after its first two years of operation, would concentrate on two areas:

● The mechanism and behaviour of climate. This would concentrate on the reconstruction of past climatic

and on ways of improving prediction through the use of climate modelling. The British Meteorological Office and the European Centre for medium-range weather forecasting at Bracknell are already carrying out such work.

● Climate and Man. The commission proposes that research would concentrate on weather effects on land, water and energy resources, and the evaluation of climatic hazard or sudden change. In such areas there would be research with special emphasis on the accumulation of carbon dioxide.

It is proposed that the programme would be implemented through cost-sharing contracts with private and public research institutions in the member countries. There would also be provision for the participation of the 10 non-community countries of the European Cooperation of Scientific Technicians.

Student study will aid 16-year-olds

by Patricia Santinelli

Are we providing courses to fulfil the needs of 16-year-olds not wishing to go on to A level studies? This is one of the questions that the National Foundation for Educational Research is asking itself, particularly in the light of recent research which shows that young people following O level courses at that age achieved very poor results.

The aims of the investigation, being undertaken by Dr Bruce Chown, NFER principal research officer, is to provide those involved in the guidance of 16-year-olds with information on the wide range of one-year full-time courses available. It is also designed to help schools and colleges decide on the type of courses they should offer their one-year students to identify the type of students for whom a particular course is most appropriate.

Particular attention is being paid to O level City and Guilds foundation courses and CSE, because in theory these are available to all types of institutions. But other alternatives are also being considered.

Each type of course is being evaluated in terms of student motivation and interest, examination success, and extent to which students achieve their ultimate education and employment objectives.

The project, due to be completed by 1980, is focusing on a study of approximately 1,000 students from their own and one-year courses in post-compulsory education in a range of institutions through to their final examinations and subsequent destinations.

Data on students' vocational interests, previous academic attainment, motives and expectations will be collected at the beginning of their courses and added later to information on examination results and destinations. The difference in O level course results between those taking a subject for the first time, those who are repeating examinations failed in the fifth year, and those following CSE to O level conversion courses, is also being investigated.

Project to continue

A project to monitor the first jobs obtained by planning graduates is to continue for another three years, thanks to renewed support by the Social Science Research Council.

The study, carried out by a small group of planning lecturers at Birmingham, Kingston and Oxford polytechnics, has already investigated 1976 and 1977 graduates. The organizers say the investigation is a lack of comprehensive first employment data.

Aims are to collect data on first employment, to investigate graduates' views on early jobs and of their planning courses.

Leave to learn survey reaches half-way mark

by Maggie Richards

The largest survey of paid educational leave provision ever undertaken in Britain has reached the halfway mark of its two-year term.

A major part of the study involves collecting information from educational institutions in 21 local authority areas and two divisions of the Inner London Education Authority.

The research team, based at Middlesex Polytechnic, is also planning a survey of the in-company provision for paid educational leave made by industry.

The project, funded by the Department of Education and Science and the Training Services Division, was launched in November 1977 as a joint venture of the National Institute for Adult Education and the Society for Industrial Tutors.

Apart from these two groups, delegates appointed to the project steering committee include representatives of the TUC and the CBI. The aim of the survey is to cover the three fields of paid educational leave: vocational training; trade union and workers' representation training; and general and liberal studies.

Why wilting plants benefit from a dose of aspirin

by Ngaio Creguer

The old wives' tale that aspirins in a vase of water helps flowers to stay alive longer is true, according to a study at Lancaster University has confirmed that plants watered with an aspirin solution are less inclined to wilt.

The reason is that the aspirin reduces the rate at which the leaves lose moisture to the air. Visiting Professor Alfonso Laguarda-Saavedra, of the Postgraduate College, Chapingo, in Mexico, has been testing his discovery in the department of biological sciences at Lancaster University using techniques and equipment developed by Lancaster botanists.

During his stay at Lancaster, Professor Laguarda-Saavedra has been examining the mechanisms causing the pores in leaves to open and close. He found that water containing very low concentrations of

aspirin closed the pores in the leaves and reduced the amount of moisture lost to the atmosphere. The discovery could help prevent crops from dying from drought.

In countries with dry areas to conserve water, aspirin has the advantage of being cheap, easy to apply, and is effective in very low quantities. As far as we know it has no harmful side-effects.

Professor Laguarda-Saavedra said that spraying plants with aspirin during dry periods would give farmers some measure of control over moisture loss. In equatorial areas like Mexico with long periods of low rainfall, farmers would have a better chance of conserving their crops.

US Navy calls in Teesside

The United States Navy has awarded Teesside Polytechnic £32,000 to study the effect of hull roughness on ship performance.

It is rare for such contracts to be awarded outside the United States—and the new one is believed to be the only one held by a British polytechnic.

Teesside's mechanical engineering department has been carrying out research in this field for three years, using its extensive facilities for

measurement, and a 60 ft flow channel.

The work is supervised by Dr T. R. Thomas, an expert in surface micro geometry, who has specialized in ultrasonic measuring of liquid hull roughness for the Navy.

External funds for the research now total £30,000, including £3,000 from the Science Research Council.

North American News

Boyer will quit to head Carnegie Council

by Clive Cookson

WASHINGTON

Boyer, the United States Commissioner of Education, is to leave the post of next year—to head the Carnegie Council for the Advancement of Education.

Boyer's appointment, which is due to be confirmed by the Senate, was announced last week. At the time, the Carnegie Foundation's president, Dr. Robert M. G. Ross, said that the Carnegie Council for the Advancement of Education, which was set up last year, was still in the process of being organized.

It is proposed that the programme would be implemented through cost-sharing contracts with private and public research institutions in the member countries. There would also be provision for the participation of the 10 non-community countries of the European Cooperation of Scientific Technicians.



Ernest Boyer

The council's staff and resources will be taken over by the main body of the new president.

Dr Boyer will take over the responsibilities not only of Clark Kerr, but also of Alan Pifer, the past president of the Carnegie Foundation for the Advancement of Teaching, who will go down at the same time.

Dr Boyer will retain prestige of the foundation's sister organization, the Carnegie Corporation of New York.

"It just made sense at this time in the history of the two organizations for the foundation to have a single president and a single administrative responsibility," explained Mr Pifer.

"This decision allows for the relocation of the Carnegie Foundation for the Advancement of Teaching, which has been in New York since 1957, to Berkeley, California, where it has undoubtedly led the way in higher education policy making in the United States."

Dr Boyer has not yet revealed where he wants to work from. He was appointed as Commissioner of Education in April 1977, and spent seven years as chancellor of the State University of New York.

Dr Boyer, who is 50, stays at the Office of Education until the end of 1979, as planned, he may well be the last Commissioner of Education. For the 110-year-old position will be abolished if the Administration-backed Bill to create a new Cabinet-level Department of Education, which Congress is expected to pass this year, goes through next year.

Dr Boyer is generally thought to have made a success of his 18 months as Commissioner, given the limitations of the job. He is head of the Office of Education, which administers \$1,000,000,000 worth of Federal programmes for student grants to compensate education for disadvantaged primary school children.

Last year under Dr Boyer the Administration asked for and Congress granted a 16 per cent increase in the O.E. budget, and it fought successfully for a huge expansion in Federal student aid programmes and against tuition tax credits.

At the same time he was able to make the O.E. bureaucracy work somewhat more efficiently, after an internal reorganization. He should be able to see next year's reauthorization of Federal higher education programmes through Congress before leaving Washington.

Dr Boyer's pet subject, if he has one, is the need to reintroduce the "core curriculum" into American undergraduate education. He wrote "Educating for Survival," about it last year with his former assistant, Martin Kaplan, and he has continued to work away at the theme as Commissioner.

Clark Kerr, who joined Carnegie in 1965 after six years as Chancellor of the University of California at Berkeley and nine as president of the UC system, warmly welcomed the appointment of his successor.

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Dr Boyer is generally thought to have made a success of his 18 months as Commissioner, given the limitations of the job. He is head of the Office of Education, which administers \$1,000,000,000 worth of Federal programmes for student grants to compensate education for disadvantaged primary school children.

Last year under Dr Boyer the Administration asked for and Congress granted a 16 per cent increase in the O.E. budget, and it fought successfully for a huge expansion in Federal student aid programmes and against tuition tax credits.

At the same time he was able to make the O.E. bureaucracy work somewhat more efficiently, after an internal reorganization. He should be able to see next year's reauthorization of Federal higher education programmes through Congress before leaving Washington.

Dr Boyer's pet subject, if he has one, is the need to reintroduce the "core curriculum" into American undergraduate education. He wrote "Educating for Survival," about it last year with his former assistant, Martin Kaplan, and he has continued to work away at the theme as Commissioner.

Clark Kerr, who joined Carnegie in 1965 after six years as Chancellor of the University of California at Berkeley and nine as president of the UC system, warmly welcomed the appointment of his successor.

California may be sued on secret files

from our correspondent

WASHINGTON

The University of California is preparing to take legal action against the state government over a Bill that would force the university to give faculty members access to the confidential documents on which promotion and tenure decisions are made.

The case raises major questions not only about academic personnel practices but also about the relationship between the country's most prestigious public university system and the state government that funds it.

Last week, the 10 regents voted, with only one dissenting voice, to start legal proceedings to have Senate Bill 251 declared unconstitutional. They claim it clearly contravenes the California constitution, which guarantees the freedom of the university from state interference.

The Bill was sponsored by the American Federation of Teachers (AFT) and passed both houses of the California legislature in the summer. Governor Jerry Brown then signed it into law, despite heavy lobbying by the university, which wanted him to veto the Bill.

From January 1, when the Bill is due to take effect, it will require the university to make available to faculty members the confidential documents on which personnel decisions are based. Although the name and affiliation of the authors will be removed before the release of the documents, it seems that many opponents of the measure feel it will ruin the system under which tenure and promotion are based on confidential evaluation by the candidate's academic peers.

They fear academics will no longer write so candidly about their colleagues, because their identity might be apparent from the text of the document even if their name is blotted out.

Under the present procedure—introduced a year ago after a lot of preparatory work by faculty and administrators—UC faculty members have the right to see a "comprehensive summary" of the confidential source documents about them, but not to see the actual documents. The summary is prepared by a senior member of the faculty or administrator and reviewed by an academic committee to ensure that it is a fair account of the material in the file.

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One UC regent, Stanley Sheinbaum, was put in a particularly painful dilemma by last week's meeting. For he is chairman of the American Civil Liberties Union in Southern California, and the ACLU was one of the strongest supporters of Bill 251.

He wants UC to introduce a system based on Bill 251, but of its own free will—not through unconstitutional legislative action. He believes academics could write frank appraisals of their colleagues without giving away their identity, if they know beforehand that their words are going to be read by the subject of the evaluation.

Phil Hoehn, president of the AFT university council, says he favours a completely open system and he denies that it would be signed reviews the faculty write about one another's books, they can be incredibly vicious," he comments.

However, when the AFT initiated Senate Bill 251 it did not ask for a completely open system because it wanted a compromise measure acceptable to UC faculty members. "It's a basic civil liberties issue," Mr Hoehn, a librarian at Berkeley. He compares the present system of comprehensive summaries to "a trial in which the defendant is kept away from the courtroom and has to base his appeal on a summary of the prosecution's case."

Governor Brown thought long and hard and consulted both sides at length before signing Bill 251, according to his education aide Bob Moore. "He decided that there was one way of allowing faculty members who have not become part of the mainstream to have more of a chance to challenge the decisions made by the academic senate and its committees."

Mr Moore says other state employees have the right to see their personal files. Governor Brown did not agree with the argument of UC president David Saxon that the selection and promotion of good faculty members would be jeopardized if the same rights were given to UC academics.

Harold Horowitz, vice-chancellor at UCLA and a leading architect of the present evaluation system, thinks most UC faculty members are finding that it works fairly and fully safeguards the rights of the individual (though he admits there are complaints about the amount of paperwork involved).

However, vice-chancellor Horowitz points out that CSUC is allowed to use confidential evaluations when deciding whether to appoint a new teacher—and the candidate is not even allowed to see a summary of them.

Bill 251 applies only to the nine campuses of the UC. The California State University and Colleges (CSUC), the second tier of public higher education in California, is subject to an AFT-sponsored Bill passed in 1976, which entirely abolished confidential evaluation for promotion and tenure.

"Our Bill allows us to see anything in the file and prohibits the use for personnel actions of anything that is not open," says Warren Kasper, president of the United Professors of California, the AFT affiliate at CSUC. "We don't have faculty complaining that they can't write confidential evaluations," he adds.

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Uncertainty on Carter prices package

President Carter's anti-inflation programme, announced on October 25, left the higher education community uncertain and rather apprehensive about the likely effects on colleges and universities.

Overseas news

Attack on research council

from A. S. Abraham

BOMBAY

The Indian Council of Social Science Research, set up in 1969 to broaden the base and raise the quality of social studies in the country, is unequal to the task.

This is the blunt conclusion of an expert review committee chaired by an eminent economist, Dr V. M. Dandekar, who is himself connected with a well-known social science research body, the Gokhale Institute, in Pune (once Poona), near Bombay.

The committee finds the ICSSR's work within the country as well as its international collaboration programme unsatisfactory.

As regards the first, its faults are the Council for keeping the vast majority of social scientists in the country out of its research projects. A few established centres have cornered about 80 per cent of them. Specifically, out of 700-odd projects it funded between 1969 and 1977, some 600 were handled by a handful of university departments and research institutes. Teachers in university-affiliated colleges got less than 50. About one-quarter of the 700 went to institutions in the capital, New Delhi, especially Jawaharal Nehru University, founded only a decade or so ago.

The committee concedes that many teachers in affiliated colleges may not be properly trained to do research. But it urges the Council to involve them in its work, to help them identify areas of research and to assist them in how to go about studying them. It also proposes that it should make more projects for institutes which get grants from the Council to hold a minimum number of seminars for teachers in affiliated colleges so that they can keep in touch with current developments in their field.

The international dimension of the Council's work, says the committee, is too West-oriented. Here again, it says, the programme has benefited "a limited number of scholars who are all too frequently airborne."

The original objective of the programme, begun in the early '70s, was to promote the fruitful interaction of Indian and foreign social researchers through conferences and study visits. But the way it has worked according to the committee, shows "a systematic bias in favour of 'Europe and North America'."

Out of 92 beneficiaries of the Council's assistance, 51 went to Britain and North America, 10 to South-East Asia and three to South Asia. Likewise, of 40 foreign scholars invited to India by the Council, 24 were from the West and six from Asia. The committee feels that the priority should be given to "building closer relations with... social scientists in Asia, particularly South and South-East Asia."

One sensitive issue the committee deals with is the foreign funding of social science research in India. Today, research institutes are directly in touch with funding agencies abroad, a practice which, says the committee, causes "considerable concern among social scientists." But it rejects the suggestion that all foreign money should be channelled through "a single agency, that is, the ICSSR."

"We are not sure," it says, "that the concentration of such large funds and the accompanying patronage in the hands of the ICSSR will be desirable for its own healthy functioning."

Parental support

Official figures released show that in 1976, 61 per cent of West German students were being supported by their parents, but only 5 per cent of them were receiving more than DM600 a month. The economic recession also made it more difficult for students to top-up their finances by working during vacations.

Government cuts campus study leave in Australia

from John Kirkaldy

SYDNEY

Staff at Australian universities and colleges of advanced education (CAES) have reacted angrily to a federal government decision to cut study leave entitlement. This follows the government's decision to accept the final recommendation of a report by a working party of the Tertiary Education Commission (TEC) headed by Professor David Dunbar.

The general secretary of the Federation of Australian University Staff Associations (FAUSA), Mr Les Wallis, said the cuts would be a serious blow to the research objectives of universities and the quality of education. The general secretary of the Federation of Staff Associations of Australian Colleges of Advanced Education (FSAACE), Mr Ross Holmes, said the cuts would severely reduce Australia's capacity to cope with technological change.

Among the major reforms are: individual absences on study leave should not be generally more than six months; and the granting of study leave should not be automatic but should be based on the needs of the institution, the nature of the project proposed and the capacity of the staff member to make use of it.

Also proposed is the maximum limit on study leave should be 7 per cent of available man-years, of staff time of the grade of lecturer and above, averaged over the triennium for universities and 5 per cent for CAES; and that the present emphasis on overseas study leave should be reduced. There should also be greater public accountability for study leave by academics and the use of study leave as a means of upgrading academic qualifications should be eliminated, it says.

The report says that it "found no evidence of widespread misuse of the study leave system," but that "on occasions some academic staff may have taken unreasonable advantage of the opportunities afforded. There has been some media coverage of academic 'bludgers' (Australian slang for anybody sponging off public funds), but no specific cases have been instanced."

At present, Australian academics are generally entitled to a year's

leave after six years' service or six months after three years. The number of academics on study leave has risen dramatically: in 1970 the number of university staff involved was 550, while in 1975 the figure had risen to 928. The total cost of study leave at present is about \$4.2m in fares and travelling allowances.

The Minister for Education, Senator John Carrick, announced that the new system will come into operation on January 1. He said that the recommendations would save \$1m next year and a further \$1.5m in 1980 and 1981.

"There will be no reductions in the funding of tertiary institutions as an offset to these savings. However, the Government wants institutions not to absorb the savings in their personal expenditure but to reserve these against possible emerging demands arising out of the Williams committee report or other government initiatives," he said.

Staff associations have estimated that the cuts in study leave will mean a reduction of about 20 to 30 per cent in the present entitlements.

The most important implication of the report is that study leave is no longer a right for academic staff (non-academic staff such as full-time administrators no longer have any entitlements, but an allowance, subject to defined conditions).

Academics have, however, been able to gain some concessions from the Government, as the draft report was even more severe on conditions for study leave. For example, it recommended that individual staff members should not be absent for more than 13 teaching weeks in a three-year period. This has been altered to 15 weeks in the final report and even further, to 18 weeks, under special circumstances.

Examples of these exemptions include young academics experiencing a sabbatical period, an overseas institution, language or other special circumstances requiring a full seasonal cycle for experimental work or sufficient time to set up major experiments and staff members seeking professional experience in major industrial companies.

Shortly before the publication of the report, it looked as though the Government might take an even



Education Minister John Carrick: savings of \$1.5m planned.

stougher line. The Prime Minister, Mr Malcolm Fraser, recently warned in Parliament that the overall indirect and direct cost of study leave was more than \$40m a year—an announcement that many saw as a warning of impending harsh cuts.

A deputation of vice-chancellors, led by Professor Rupert Myers, chairman of the Australian Vice-Chancellors Committee (AVCC), met Mr Fraser after this speech to argue the case for study leave.

Interest is also focused on the attitude of the opposition Labour Party to the study leave issue. The party's spokesman on Education, Senator John Button, said that the Government had adopted "a spastic approach because it wanted to slap the stick on the wrist" as it rebuked the academic "fat cat."

The Labour Party has not yet, however, made any commitment to reverse the study leave changes if it is returned to power.

Some academics were surprised by the reaction of Professor Myers to the Government's decision. He said that "the report would be greeted by universities with relief." The new guidelines "seemed reasonable and appropriate for universities in these times." This endorsement is seen by many observers as a sign of the staff associations' campaign against the cuts.

New links in science policy

from Guy Neave

Closer collaboration between research and industry is to be a major priority in French science policy. The broad lines of this policy were unveiled last week by the Secretary of State for Research in a speech to the National Research Council for University Research.

M. Pierre Aigrain, recently appointed as Secretary of State for Scientific Research, has a long ground in this area. Until recently he was research director to a large firm and is a specialist in solid state physics.

Government-financed research institutes, he said, should be prepared to undertake work in conjunction with private industry, particularly in the area of electronics. Coming from a man who has spent considerable time in the United States and in MIT in particular, the message is not particularly novel. It is, however, in the current French context.

One of the major obstacles to better relationship between research and industry in France is the existence of numerous practices which discourage those who have worked in government research but I don't restrict all of their work in the private sector. One of the most intractable is the fact that researchers are regarded as civil servants.

As such, they are forbidden by law to become administrators in private firms on a part-time basis. Those wishing to do so must leave the public sector and virtually to resign their jobs. The consequences of a move are considerable. A researcher in a government-financed institute loses two-thirds of his salary rights if he makes the move. Nor are penalties any less for university teachers. If they take a consultancy they risk losing their research allowance from the Government.

Among the first tasks Mr Aigrain is to tackle is a modification of law to exempt researchers from the law against accumulating Government and private posts by single person. The purpose of the proposal is not entirely clear, but the notion of increased mobility and efficiency in industry.

There is also the need to complete the imbalance that exists in the age structure of research bodies. In the medium term, the objective is to get a more even distribution of research into the private sector. And in the long term, the problem of a rapidly ageing research body will be solved by the injection of new blood into the public sector.

This is not the only difficulty, however. Another is how to induce firms to make a greater investment in research and development. In research and development, the Secretary of State has already commissioned an inquiry into stimulating investment by offering tax advantages to firms who make such decisions.

Despite the often good intentions behind this move, the problem is by no means as simple as it seems. A major solution is the demand for specialists in solid state physics, and the Secretary of State has already announced a plan to attract the best of the young to the public sector.

Education Minister Mario Pedini, hard pressed over the last few weeks by crippling teachers' strikes, was quick to point out that the emergency law will eventually become part of the university reform bill—and so can still be modified.

The reform bill, which has been dragged on for a decade, is soon to be debated by parliament after being completed by the inter-party education committee last month.

The Norman crusade against pomposity

The sayings of Dr Edward Norman, dean of Peterhouse, and this year's Reith Lecturer, abound in Cambridge. The main himself is more elusive. The first clergyman ever to deliver the lectures says: "If the BBC had asked anyone in the church hierarchy who they would choose, they would have put me at the bottom of the list."

The remark accords well with his image. A favourite of right-wing newspapers, loner, satirist, Dr Norman has enemies in plenty. He wrote of the bishops at the recent Lambeth conference that they were "in the upper deck of a sinking ship." The bishops of the Church of England are still magnificent in their purple and stiles but they are not far off from the waterline.

"Why does he do it?" "Partly because I can't resist," he says. "Partly because I'm irascible. His humour is implicit in the 'fellows' garden at Peterhouse and explains that the deer park is now empty because the deer, unused to the privations of rationing, got hungry in 1940 and ate all the deer. His antipathy to some kinds of contemporary academic stems from his impatience with pomposity, his frustration with their lack of sense of humour. 'They are such a lot of pathological moralists'."

He agrees that he is rude to people. "I have done some terrible things but I don't regret all of it." Scattered conservative views are dismissed very bitingly and he does not see why the left should be immune from the treatment to which it subjects the right. But he does not see why it just for amusement. He believes passionately in the attacks on the establishment, whether Church or State. Satirical humour is one way of getting people to listen to him.

Dr Norman, who is 39, was born in London and brought up in Kent where his father was an accountant on a small scale. It was a lower middle-class family with an



Dr Norman at Peterhouse, where he looks after spiritual welfare

particular Church connexion. He and his two sisters were both sent to Sunday school "but, like most children, we lapsed at the first opportunity." His father, who left school at 14, represented all the virtues of self-help and individualism. His son reacted against them during his youth but has come to appreciate them increasingly of late.

He was educated at two grammar schools "both very good ones" and went up to Selwyn College, Cambridge, in 1958 to read history. He had thought about ordination as a

schoolboy but abandoned the idea in the series of fluctuations of faith in his youth.

He became a research student in political history, was made a don at Selwyn and went on to Jesus in 1964 as a tutor and director of studies. It was there that he decided that he must be ordained. "I was comfortably settled in an academic career and it was much to my annoyance that I decided I had a vocation."

Owen Chadwick, the master of Selwyn, advised him against becoming

an parish priest, though Dr Norman felt and still feels that this is the ideal form of priesthood. But he decided that if he went to be a vicar he would never get back into academic life.

In 1970 he became dean of Peterhouse where he sees his job as pastoral. His aim is to look after undergraduates' spiritual welfare. He lives the life of the traditional bachelor dean in a college which many people in Cambridge regard as the last bastion of Oxbridge reaction.

Edward Norman is not easily pigeon-holed. "Every time I write something I get letters from a lot of dirty right-wing people who think I believe what they believe." He is a very political animal but belongs to no party. Last year he turned down an invitation from Sir Keith Joseph to speak at a fringe meeting at the Conservative Party conference. He votes Conservative but the only party he has ever been a member of is the Labour Party. "If I were a Tory party activist I would be a Heath man," he said.

In his youth he was a socialist. His first job when he left school was teaching in a secondary modern school in Walthamstow. "It was a very good school. The parents were deeply concerned about their children's education, something we normally associate with middle-class parents."

As an undergraduate he was Conservative but in the late '60s the student revolution brought him round again to the belief that there was a need for basic structural changes in university and society. He now believes that he was wrong and that the student revolution involved a lot of cant.

He supports the Conservatives because he thinks they are still the party which has most people in it who refuse to impose their views on others but he denies that he is Conservative. "To be Conservative you have to think things were better in the past." He is too good an historian to think this.

He describes himself as a sceptic and a realist and points out that he uses Marxist intellectual tools in reading history. "I look a lot at the operation of false consciousness," he recently told a Russian television interviewer who thought the struggles in Northern Ireland were about religion that they were about culture and class. "You are that the one I least think I am," said the interviewer.

It is, however, a staunch defender of capitalism not in the absolute sense but in the right system for our times. In a speech to the Standing Conference of Employers of Graduates last year he attacked the threat to capitalism from establishment thinking and from teachers in schools and higher education.

It is not surprising that such a highly political creature has chosen the relationship between Christianity and politics as the subject for his Reith Lectures. His contention is that Church leaders in the West are guilty of politicising Christianity. In theory this may be all right but in practice they become purveyors of ordinary western bourgeois liberalism.

"There is a lot of vicarious class guilt about. The Church of England is run by guilty public school boys." His impatience with the accepted views of the Church establishment is at its most acute in his latest book, *Church and Society in England 1770-1970*. Not only do the liberal intellectuals come under attack, but also William Temple, the liberals' hero, is removed from his pedestal.

One of his criticisms of the Church in the West is that it entrusted its perception of the truth to words and ideas. There are advantages in this but it makes religion difficult for those who are not used to the "cultural turn-of-mind." "It encourages the idea that religion is for literate blokes."

Theologically, he is conservative. "I am deeply anti-pastoral to most trends in contemporary theology." The controversial Myth of "Incarnation" he describes as "fundamentalist atheism." A hundred years ago, its authors would have been considered free thinkers. "I am conservative in the sense that I believe Christianity is all true."

He knows that he will be accused of being negative and perhaps this is inevitable for a man who is both an analyst and a realist. His positive side comes out in his work with the undergraduates at Peterhouse and as a hospital chaplain.

He is, however, deeply pessimistic about the future of the society. "I shall be very surprised if we get to the end of the century without a nuclear catastrophe."

Despite what he describes as his "corroded view of human nature, he is not altogether without hope for the salvation of society but people are different. 'Salvation is off. Humanity is on.'"

Service that spans the gap between two worlds

Maggie Richards reports on Merseyside's new education guidance service for adults

A graphic illustration of the urgency of the job ahead for the new Merseyside educational counselling service sits almost on its doorstep. Within walking distance of Liverpool University, while being surrounded by the city's most notorious areas of deprivation—

Spanning the gap between these two worlds will be one of the most challenging tasks for the new agency, which seeks to help adults return to the education system.

But the brief of MEGSA—the Merseyside Educational Guidance Service for Adults—is far wider than Liverpool's city boundaries. Following the upriver course of the Mersey, the service extends into Cheshire, to the fast-expanding new town of Warrington.

From the first start of its operations some weeks ago, MEGSA has had to adopt two diametrically opposite approaches to the complex needs of a city beset by social and unemployment problems, and the equally demanding of a thriving new town 17 miles away.

To cater for these diverse needs, MEGSA has attempted to combine two practices gleaned from earlier days of Belfast and Cardiff, adapting where necessary to suit circumstances. As such, it represents an interesting example of a second tier service, established in the wake of innovative efforts elsewhere.

MEGSA was largely the brainchild of Professor Edwin Rhodes, director of Liverpool University's Institute of Extension Studies. His

interest in guidance and counselling services for adults in turn alerted other prominent members of the Merseyside and District Institute of Adult Education—a professional body established in the region to encourage a flow of ideas and to promote initiatives in adult education.

Last year this body, which numbers among its members Mr Kenneth Antcliffe, director of education for Liverpool, and Mr John Tomlinson, chief education officer for Cheshire, set up a working party to investigate the best method of establishing an educational counselling scheme. As a result of the team's deliberations, a management committee was formed to oversee the project.

Representation on the committee ranges from local education authorities' appointments to delegates from highly specialized sectors such as the careers service and libraries. From higher education have come the principal representatives of colleges and polytechnic and university, and the Open University. Striding alongside them are members drawn from authorities responsible for the new town's complexes surrounding Liverpool.

Such a wide variety of interests reflects the license feeling that from the beginning MEGSA should be established on a totally independent basis. It is a principle argued by many to be an essential feature of a sound educational counselling system.

The anti-alone policy is re-schooled in the financing of the scheme, a collaborative effort between the participating organizations. L.A.

funds have been used to provide staff and the scheme's Liverpool offices; the Manpower Services Commission as part of its special temporary employment project is contributing further money for additional staff; donations are being made by the Workers Educational Association and various other charitable organizations. Warrington new town is providing some cash and there is the promise of premises in a huge community complex which is being constructed.

MEGSA's two principal staff have both come from colleges of higher education. From Cheshire, Mr Colin Martin has been seconded to direct the scheme, while Liverpool has provided the services on a part-time basis of Mrs Pat Davis, a lecturer at the Ethel Wormald College of Higher Education in which the scheme's offices are based.

Mr Martin, senior lecturer in music at Padgug College of Higher Education, has been a tutor-counsellor with the Open University for three years and has also been involved in extension classes organized by Liverpool University. Mrs Davis became interested in the scheme while engaged on an education counselling research project.

She has post as lecturer at Ethel Wormald has involved the training of mature students for primary school teaching, and she has considerable experience of marriage guidance counselling.

It was recognized from the start by the two staff that in order to avoid confrontations, MEGSA would need to make its role abundantly clear to educational organizations and other agencies in the region.

One of the initial approaches was to the careers guidance service, and it paid off handsomely. Cross-flow of clients was established, and a sound educational counselling system.

has adopted a policy of not accepting clients until three years after the completion of full-time education.

All the preparatory activities have taken place in the last nine months, since MEGSA's inception on January 1. The service is officially opened for business on October 1, and its work is scheduled to continue until the end of August next year, when its progress will be reviewed.

Significant differences between lifestyles in Liverpool and Warrington led Mr Martin and Mrs Davis to develop a policy of use of totally different tactics for each area.

At the Liverpool end of the project they chose the Belfast counselling model, pioneered by Dr Dorothy Eagleson, and established on the principle of encouraging referrals from other agencies.

In Warrington, designated as a new town only 10 years ago, and designed to accommodate the overspill from Liverpool and Manchester, it was felt more appropriate to apply a more direct approach to clients, similar to that of the OU-sponsored Cardiff counselling service. With a network of community houses serving estates in the new town and the prospect of a vast community complex being established in the new town, it was felt MEGSA would do a better job by employing face-to-face tactics in Warrington.

Initially, MEGSA has selected three areas comprising about 20,000 people, and has secured an arrangement for counselling sessions to be held at the area's community house. While this approach will form the bulk of MEGSA's work at Warrington, there are also plans to explain and publicize the service's function in talks and discussions with local community groups.

Inevitably, it has been the Liverpool end of the project which has blossomed first.

Already in Liverpool MEGSA's files are beginning to bulge.

Client A: Referral from Liverpool's Department of Women aged 53 who completed full-time schooling at 12. Progressed from an office typing pool to become secretary to company director. Some experience of administrative work in a hospital, and now expressing an ambition to become a hospital almoner.

Client B: Referral by Liverpool University. Student who originally embarked on teacher training course and was highly successful in theoretical work, but failed miserably in practical classroom sessions. Admitted that teaching had been a wrong choice, but began "to have doubts about academic ability, and decided to quit course. MEGSA intervention has led to transfer to business studies programme where progress is reported to be good."

Client C: Son of immigrant businessman. Forced to abandon A-level studies to join family business. Now, several years later, has covered parental links and aims to go to university. MEGSA has helped in obtaining grants for O and A-level studies.

Apart from acting as a counselling service, MEGSA has also been directed by its management committee to give attention to coordination of provision as new adult education needs emerge. In this respect, one of its first tasks has been to liaise with Walton Prison about the plight of prisoners unable to pursue their higher education studies on release.

Essentially, the MEGSA scheme is still very much a research project, and its continuation cannot be guaranteed beyond August, 1979. But with three MEC appointments now being advertised, and the intention to employ an additional three staff to service the Warrington part of the project, the outlook looks bright indeed.

Cabinet passes emergency law to stave off threat of staff boycott

from Uli Schwetzer

ROME

The Italian Cabinet last month pushed through an eleven-hour emergency law that saved the country from the threat of a university boycott by teachers.

The stop-gap measure, grandly labelled "reform for teaching," was hurriedly written into the statute books after thousands of teachers' protests, and the other for teachers' strike, had walked out in protest over unjust wages and insecure jobs.

The law (which needs to be ratified by Parliament within 60 days) has extended the contracts of the precari (lecturers with temporary appointments) for another year, only two weeks before their annual contracts were due for review.

Its timely advent has saved an estimated 17,000 teachers facing the prospect of unemployment at the end of the month.

The law tries to replace a feudalistic appointments system based on nepotism and the whimsies of faculty deans. It divides higher education staff into three categories and creates an independent state mechanism (a board of examiners) to classify teachers through contests.

After more than a decade of protests by academic staff the law has been passed in three kinds of teaching categories:

● The *Assistenti ordinari* (non-faculty heads but fully qualified professors already with a permanent status): their number was increased from 7,000 to 15,000. The new posts created will be awarded to the "winners" of two types of contests: one for teachers with a minimum of eight years experience (2,704 posts); and the other for teachers with a minimum of six years experience.

● *Assistenti associati* (professors without permanent status): this category has been increased from the present 12,449 to a 15,000-member ceiling. To achieve permanent status each new member must satisfy the requirements of the board of examiners, and a written pledge to work exclusively for the university.

● *Aggiunti* (assistant professors): a new category with a 14,900-post ceiling. It gathers the *borsisti* (special postgraduate assistants) and *contrattisti* (contractual teachers) into one group. Admission is by a proficiency test.

Faced with a widely varying wage structure the law has solved the clamour for more adequate remuneration in an abrupt manner. It awards the *aggiunti* a 70 per cent of that of the *assistenti* and the *assistenti* the status quo of the other two categories.

The decision (which leaves wages for the first two categories ranging from £4,500 to £5,200 a year) has boosted the income of the *aggiunti* to about £3,000 a year (an increase of about £1,000 for the chronically underpaid "Serfs" of the higher education system).

The board of examiners will sit once a year and the new quotas for each category are to be filled over a six-year period. The members of the board are drawn from each session from a list of professors whose names are submitted by university administrations and teachers' unions.

The emergency law has caused a mixed reaction among the two major teachers' unions. The largest, the National University Committee (CNU) suspended its strike (which was scheduled for September) and called the new measures "positive." The second, the movement for stabilisation of the staff (MSS), denounced it as "inefficient" and asked its members to continue their action to boycott university examinations.

Education Minister Mario Pedini, hard pressed over the last few weeks by crippling teachers' strikes, was quick to point out that the emergency law will eventually become part of the university reform bill—and so can still be modified.

The reform bill, which has been dragged on for a decade, is soon to be debated by parliament after being completed by the inter-party education committee last month.

First toxicologists

Sweden's first fully qualified toxicologists have completed a post-graduate course in the subject at the Karolinska Institute. 16 full-time students graduated successfully.

The CNAA: a growing cause for concern



What is the justification for giving so much power to an independent chartered body, asks Dr Arthur Suddaby

For some years there has been growing disquiet on the part of polytechnic directors about the way the CNAA interprets and exercises its responsibility under the charter to make a judgment of an institution as a whole by means of a quinquennial visit.

The council possesses the power, through an adverse report, to induce the collapse of an institution, to destroy the career prospects of many thousands of students. For such power to be in the hands of an independent chartered body is unusual and might well have given concern if it had been foreseen. The impact of the publicity given to the Teesside report demonstrates how necessary it is for the chartered body to exercise its power within its intended terms of reference and to base its judgments on reliable evidence. Such is the power that the chartered body wields that failure to exercise this care can lead to serious consequences, not only for individual colleges but for higher education as a whole.

What, then, is the justification of entrusting the validating of academic standards to an independent chartered body and what limits should be placed on its powers? Academic standards must be safeguarded by the external examiner system used by both universities and polytechnics. It ensures that the standards of examinations are maintained. It can be argued that colleges in the earlier stages of development should have courses of study approved for academic content and standard before they are allowed to enrol students. If this is conceded, it is sensible for such approval and validation to be carried out by an independent chartered body since judgments on academic standards must be free from political pressures.

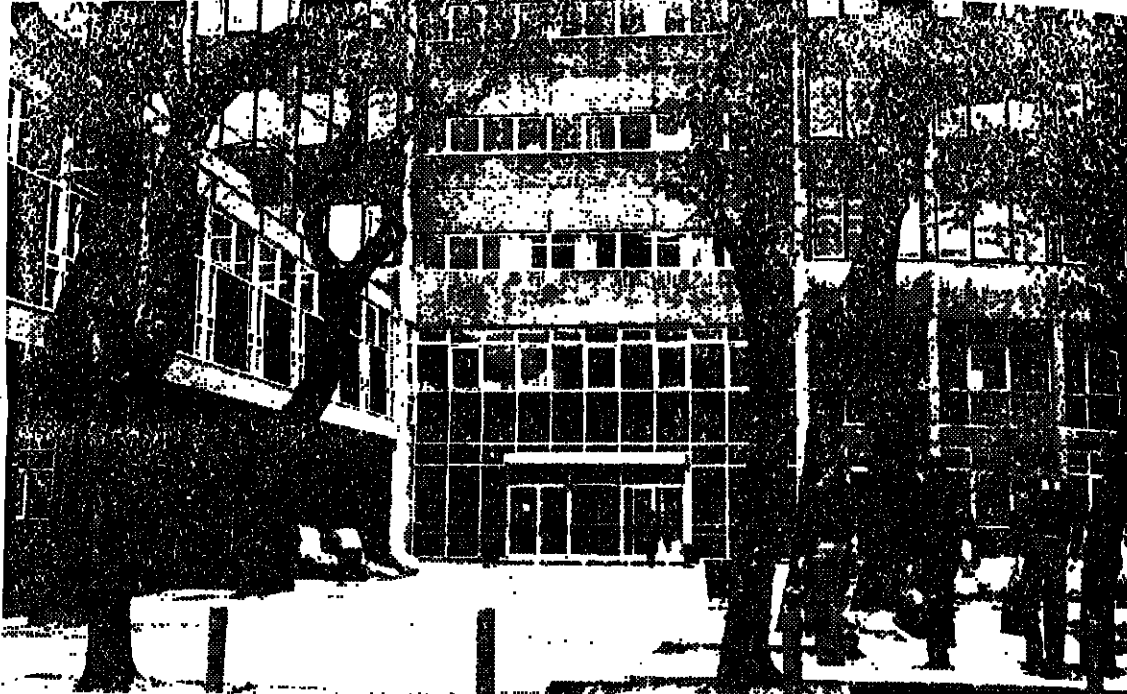
It is also reasonable that the validating body should make a judgment of an institution as a whole, as a satisfactory academic environment for the individual courses, so that one does not have a course, satisfactory on a subject point of view, conducted in an environment which is academically inferior. It is, however, appropriate for a quinquennial review to extend its brief to judgments of an institution's conformity with doctrines regarding structure and management held by individual members of the visiting party.

In cases where there have to be judgments on management, these must surely be based on objective findings in relation to academic standards, or the satisfaction of students. Without this they amount to nothing more than demands for doctrinal conformity and are particularly lacking in credibility if they are made by visiting parties whose expertise does not extend to experience in managing large institutions. If academic standards are being maintained then it is not the function of a validating body to make judgments on the management, structure and organisation by which those standards are achieved.

It may also be relevant for a validating body to make judgments on the resource levels available but judgments of this kind are only valid if they are based on reliable evidence and related to objective criteria. A recommendation on resources from CNAA, based on properly documented evidence and comparisons with established criteria of the current year, might be a very well help an institution to secure a more appropriate level of resources, but judgments on resources, based on the subjective views of members of a visiting party who have not gone further than looking round an institution and talking to a number of members of staff, are likely to discredit a case for resources rather than assist it.

Finally, the terms of reference of the validating body are to make judgments which are relevant to the approval of courses. This entails pointing out the matters of concern, wherever they may be, and the consequences of these matters in relation to the approval of an institution and its courses. The validating body has neither the authority nor the capacity to conduct an investigation into the causes of any shortcomings, or to make recommendations.

Teesside Polytechnic report "leaves us none the wiser"



ment of blame for them. These are matters for the governing body and the local authority, not for the validating body. Further, a quinquennial visit of short duration, in which there is no concentration on any single issue and in which evidence is not taken in any systematic way, cannot be regarded as a suitable vehicle for the discovery of causes or the apportionment of blame.

To come to any conclusion about the blame to be placed on an individual in such a situation would require an exhaustive inquiry which would take a considerable time and require the calling of evidence. There is bound to be concern if a validating body were to regard the superficial process of inspection of a quinquennial visit as a substitute for the inquiry and judicial procedure that could be required to establish that a particular individual were to blame.

The CNAA report of a council visit to Teesside Polytechnic exemplifies nearly all the aspects of CNAA activity which have for some time been giving cause for concern. While not adducing any evidence which indicates an objective failure of student or employer satisfaction or of academic standards, the report makes serious criticisms of the management of the polytechnic, apparently based on a cursory inspection.

It refers frequently to the inadequacy of resources, without at any time relating these to criteria which would have enabled an objective comparison to be made. Repeatedly, the conclusions of the report are in the form of judgments by members of the visiting party as to what is likely to happen rather than the identification of an objective fault. In some paragraphs objective evidence is discounted and replaced by the visiting party's belief, a belief which is either based on the visitors' subjective views of the way a polytechnic should be managed or on their conclusions about resource levels which do not appear to be related to reliable criteria.

In particular, the condemnation of the management of the polytechnic is based on the belief that local authority policies with respect to spending during the past few years of severe pressures to reduce public expenditure could have been influenced or changed by arguments by the polytechnic management.

Reference to the inadequacy of the level of resources is made in over a dozen paragraphs and in one of the recommendations. One would expect such judgment to be based on detailed analysis and objective comparison but this cannot be found anywhere in the report, except for a reference to a ratio of 1.6 for the polytechnic and 1.4 for the average polytechnic. The figures available indicate, however, that this figure for Teesside is not 1.6 but 1.3, compared with 1.4 for the average polytechnic. The following table shows staff numbers per 1,000 FTE calculation on the basis of pooling committee returns for spring, 1977.

	A Full-time Teaching	B Senior Management	C Other Admin & Prof	D Clerical & Secretarial	Total Staff
Teesside Polytechnic	114.4	1.2	10.8	30.8	157.2
Average of all polytechnics	110.1	1.8	17.2	26.9	156
Lowest polytechnic	78.2	0.9	12.7	18	111.3

For total staff numbers the figure for Teesside was 157.2 as against 156 for the average of all polytechnics. The lowest figure for any polytechnic was 111.3 as against 110.1 for the average of all polytechnics, with 78.2 as the lowest. They are lower than average on senior management staff and other administrative and professional staff, but above the lowest polytechnic (1.2 against 0.9 for senior management and 10.8 against 5.7 for other administrative and professional staff). On clerical and secretarial staff, an area in which the report heavily criticizes the polytechnic, Teesside Polytechnic has 30.8 per 1,000 FTE compared with 26.9 for the average of all polytechnics, the lowest being 18.

One aspect of staffing which these figures do not reveal, however, is the very low proportion of principal lecturers. In Teesside, as in a few I.E.A.s, including one very large authority, the details of establishments and grades was entirely in the hands of the authority. This low proportion of principal lecturers, which the polytechnic had no power to remedy, could be responsible for the low staff morale and their lack of confidence. For such lack of confidence to be directed at the management of the polytechnic, without at any time relating these to criteria which would have enabled an objective comparison to be made. Repeatedly, the conclusions of the report are in the form of judgments by members of the visiting party as to what is likely to happen rather than the identification of an objective fault.

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	Academic	Non-teaching	Professors	Support & Servs	Establishment Expenditure
Teesside Polytechnic	900	315	200	125	55
Approximate average	920	330	230	160	65
Lowest polytechnic	720	170	150	90	32

The information in the same document reveals that the annual expenditure per student on library books at Teesside is roughly equal to the highest figure for any polytechnic and more than twice the lowest.

Given the doubt that must be thrown on the conclusions regarding the resources, the paragraphs which brush aside the real evidence even greater concern. One paragraph, "The department does seem to have evolved a collective management for courses which at least are running at a standard which suggests that students whom members of the visiting party seemed surprised to find ill-informed on (and indifferent to) the course management structure. Given the fact that, in addition to the department's internal problems, it faces the resource problems common to the polytechnic (with the possible exception of accommodation, but with very deficient library resources), there must be some question regarding the students' standards of satisfaction."

This quotation, which is typical of the lines of reasoning used in the report, appears to say, as far as one can understand it, "the students said they were satisfied but, because we believe that the polytechnic has inadequate resources, then we think they really should not have been."

Perhaps the most extraordinary conclusion, however, and one which is crucial to the report, because it leads directly to the placing of blame on the director, runs as follows: "It appears to be believed within the polytechnic that the authority fails to understand the needs of a major institution of higher education, and the freedom it should be given in its own management. It was not, however, clear to the visiting party that good management within the polytechnic, and well argued representations to the authority, could not influence the attitude of the latter."

During the discussions on the Oakes Committee the polytechnic director representatives argued vigorously, against equally vigorous local authority opposition, for a recommendation that institutions should be given freedom to manage their affairs. The final recommendation still has saving clauses allowing the local authorities to place limitations on Burnham discretion, but it was the best that could be gained for polytechnics in the present political situation. Does any member of the CNAA visiting party seriously believe that the director and his assistants could have changed the view of a local authority on such a sensitive political question?

There is also a reference to a visit to Teesside College of Education and to the fact that it has been generously treated by the same local authority which must seriously believe that its practice meets these requirements. The implication of this is that the college of education had successfully argued its case whereas the polytechnic had not.

Apart from the figures for the level of resources and expenditure which can be obtained from centrally available statistics, those of us who are unfamiliar with the local situation or with the polytechnic itself, cannot know much about Teesside Polytechnic. The CNAA report on Teesside, unfortunately, makes us none the wiser.

CNAA requires that its quinquennial reports be widely circulated within an institution and this means that they will inevitably become public. The authority which CNAA judgments made public are bound to damage an institution. The process is not voluntary; it is required to submit to CNAA validation. It follows that great care must be taken by CNAA to ensure that its judgments are limited to those necessary for a decision on the question of approval by the validating body, leaving to the appropriate bodies the investigation of causes, to ensure that its judgments are based on sound evidence clearly presented in the report, and to ensure that its judgments are conveyed in a way that would assist the institution and its local authority to put matters right, rather than in a way which undermines public confidence in the institution and in maintained standards as a whole. If CNAA is unable to arrange that its practice meets these requirements, then one is bound to ask whether perhaps there are not better ways of ensuring the maintenance of academic standards.

The department does seem to have evolved a collective management for courses which at least are running at a standard which suggests that students whom members of the visiting party seemed surprised to find ill-informed on (and indifferent to) the course management structure. Given the fact that, in addition to the department's internal problems, it faces the resource problems common to the polytechnic (with the possible exception of accommodation, but with very deficient library resources), there must be some question regarding the students' standards of satisfaction."

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Sociological explanations of inflation

1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Lichtenthaler and Whistler (1973).

BOOKS

Base profits of the Caribbean

The Spanish Caribbean: trade and plunder, 1530-1630
by Kenneth R. Andrews
Yale University Press, £12.00
ISBN 0 300 02197 6

Geographers may have a term, the "American Mediterranean" to describe the entire Caribbean, which stretches 1,500 miles from the Lesser Antilles to the Yucatan Channel, but few historical studies have attempted to see the area as a whole and to set out its common history.

For a time, however, when the Spanish controlled a major part, the Caribbean did have a peculiar unity. Ignoring the Lesser Antilles, Spain had by 1530 established a political hegemony over the other four main areas: the Greater Antilles, the Panamanian Isthmus, northwards along the coast of Central America, and along the Tierra Firme coast from Cartagena to Trinidad and the Orinoco delta. Following in the footsteps of earlier English historians A. P. Newton and Irene Wright, and drawing on Pierre Chaunu's monumental statistical study of *Señeille et l'Atlantique* which makes it possible to trace the changing place of the Caribbean in Spain's colonial system, Dr Andrews attempts to see the events and developments between 1530 and 1630 from the point of view of the West Indies in order to understand the Caribbean as the context for the northern invasions.

While this replicates the trend in the historiography of other non-European areas to escape from Eurocentricity—done with greatest success so far in the case of West Africa—such an attempt is more difficult to achieve in the case of the Caribbean. Even if control from Spain was sometimes lax and diffuse, policy was more direct and complete. Also, the consequences of Spanish conquest had been the rapid obliteration of the Caribs, as

there remained no native peoples from whose standpoint the history of the area can be told. Indeed, the slave trade was essential to provide a new labour force. Stemming from his previous studies of Drake and of Elizabethan privateering, Andrews pays particular attention to the activities of John Hawkins in the 1560s. Challenging Williamson's heroic view of Hawkins, Andrews suggests that he was no different from any of the other slave traders. Base profit not lofty aims were his motivation: he abandoned the trade after the fourth voyage because it proved unprofitable. Because black workers were used to produce gold, hides, sugar, pearls and other products and there was little need for white workers, the European population remained small and Santo Domingo, an English account of 1585 reported, was "chiefly inhabited with Lawyers and brave Gentlemen".

No sooner had the Spanish exploitation of the Caribbean begun than other European countries sought to share its products, and denied the opportunity to engage in legal trade, they engaged in piracy and privateering. But the Spanish, with a substantial fleet, were by no means negligible at sea, nor were Spain's rulers indifferent to maritime affairs and the importance of sea-power. Like England, Philip II supplemented his navy with private men-of-war.

However, the economic problems of the Caribbean colonies arose less from war and foreign intrusions in the sixteenth century than from the commercial weaknesses and understandably billion-minded policies of their Spanish rulers, to which perhaps Andrews could have given more attention.

Late in the sixteenth and early in the following century, the attentions of pirates and privateers became more insistent. Andrews believes that the 76 English expeditions between 1585 and 1603,

of which we so far have knowledge represent only a proportion of the total activity. But he suggests a distinction ought to be made between their impact in the overall context of the Anglo-Spanish conflict and their effect in the Caribbean. Opportunistic and uncoordinated as they were, he argues they have been given undue prominence in conventional accounts of relations between England and Spain; whilst at the local level they helped to produce a serious crisis in Spain's Caribbean affairs.

In reply to the French and Dutch as well as English intruders, Spain organized its naval forces, took severe measures against those of her citizens who traded with the enemy and made some efforts to destroy the commercial capability of the more notorious smuggling centres. While Spain's *de facto* possessions in the Caribbean remained intact until the English capture of Jamaica in 1655, the marked growth of the contraband trade by English, French and Dutch vessels provided an essential prelude to the northern colonial movement which led to the foundation of the first non-Hispanic colonies in the Caribbean.

More effective in challenging previous interpretations than in previous chapters, Andrews has delineating his own, Andrews has effectively reinterpreted a number of aspects of Caribbean history in his chosen century. Whereas Newton saw the Caribbean as the cockpit of international maritime rivalry, Andrews concludes that it was not at this stage an important theatre of European conflict and the changes which took place there are consequently of interest in the main as part of the history of other colonial empires in the New World. If we still await a Braudelesque study of the Caribbean in the reign of Philip II, Andrews has made a significant contribution towards such a project.

Walter Minchinton

The rules of the game

The Politics of Latin American Development
by Gary W. Wynia
Cambridge University Press, £15.00
and £4.95
ISBN 0 521 21922 1 and 29310 3

Gary Wynia has set out to provide an introductory textbook for the study of Latin American politics. His point of departure is a concern with political actors, their strategies and the constraints upon them and he uses the well-worn metaphor of "political game".

This approach will certainly attract criticism particularly since, as the author himself admits, Latin American politics is bound by very few "rules" and the degree of political uncertainty is therefore high. However, there is inevitable oversimplification in his attempt to turn social forces into political "actors" with specific outlooks and resources. Also, the chapter on the main Latin American economic doctrines, while competently written, is left somewhat isolated from the rest of the book where it is needed for ideological guidance. However, Wynia's framework is merely an expository device rather than a real attempt at formalization and, such, is not of great significance. Indeed, the bland general tone of the book is bland and eclectic.

One of the main features of the book is its emphasis on the primacy of politics. In this respect, it marks a refreshing change from *dependencia* writing which tends to see politics in terms of a reflection of social and economic structures. In Wynia's treatment, indeed, it is the economy which is dependent on politics with the consequence that his discussions of economic change are generally less successful than his discussion of politics. His political sections, which cover different variants of "democratic reform" (Batanovitch, Frei), military authoritarianism (Velasco, Onganía and the *Concordia*), and revolution (Cuba, Mexico), do provide useful introductions to the problems and achievements of a range of Latin American regimes.

Similarly, his earlier, more logical chapters, while somewhat pedestrian, do introduce the social and political forces in Latin America and show evidence of reading and an ability to synthesize. The author's judgment is generally trustworthy and his discussion of the institutionalization of political account is always readable.

In general, therefore, this is a reasonable attempt to cover a wide and difficult field in a limited number of pages. It is better than a polemic "introduction" to the area (such as Chomsky and Stein) and is unlikely to arouse much criticism. The main criticisms of the book, therefore, are not so much concerned with its content as with its presentation. It is a ponderous textbook of comparative politics. Wynia adds to its effect by occasionally taking the reader to his own country, thereby linking passages, by avoiding quotation or attribution (providing instead reading lists at the end of each chapter) or any hint of controversy. That which cannot be incorporated into Wynia's (admittedly quite broad) synthesis is simply ignored.

Thus, although the book is lucidly written, it is depressing, single-minded and unexciting. It might conclude that it is better to introduce students to real arguments and controversy than to read much of the life out of the subject. As Miss Jean Brodie might say, this book is satisfactory to those who like this kind of thing.

George Phillips

The golden age of science

Construction of Modern Science: mechanisms and methods
by Richard S. Westfall
Cambridge University Press, £7.95
ISBN 0 521 21863 2 and 29295 6

seventeenth century saw come of age, as its practitioners reached out beyond "mechanical philosophy" to fashion analytical tools, and to incorporate on page 150, the account is always readable.

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structuring his argument so that it can be followed by those ignorant of even basic science. Within a limited space, the reader gets a surprisingly full account of the ideas of the major thinkers. In view of Westfall's own specialized work it is no surprise that the sections on Descartes, Newton, and later seventeenth-century chemistry should be particularly successful. The presentation of the ideas of some less-known, and largely wrong-headed, chemists is a happy inspiration, giving an unusual insight into the dangers inherent in a crude application of the "mechanical philosophy". This theme is emphasized in general; by emphasizing the numerous weaknesses of scientific thought at this period Westfall puts its achievements into a better perspective.

As a didactic exercise this book merits high praise for its handling of complex material, its clarity, and its good judgment. The few criticisms that might be made concern details of presentation, not outright errors; perhaps the originality of Galileo's mechanics could have been emphasized even more, while the diagram of the motions of Venus according to Ptolemy is more confusing than helpful. Such points, however, are few and far between, and do not significantly reduce the book's success in achieving what it sets out to do.

This said, certain doubts persist, perhaps unfairly. Westfall's touch is much less sure when dealing with the context in which scientific activity took place; his dismissal of the role of the universities, for example, is rather facile. He com-

pares the *Académie des Sciences* unfavourably with the Royal Society, without recognizing either that the social and political contexts differed, or that the relationship was to be reversed in the following century. Above all, the wider religious and cultural changes of the period hardly feature in his account, which tends to emphasize how things happened to the virtual exclusion of why they happened. One can agree that the mechanical philosophy, did indeed become dominant by the late seventeenth century, but the reasons for this are by no means obvious; Westfall tends to evade problems of this kind, so that a feeling of weighty inevitability pervades his account. In consequence, he misses many of the tensions and uncertainties that are important throughout the period, but particularly before 1650, and which give it much of its excitement. This strategy is a perfectly reasonable one, for every textbook must make such compromises, but it does mean that clarity is bought at the price of a degree of simplification.

While *The Construction of Modern Science* will be an extremely valuable aid to those teaching or lecturing about its subject, it presents something less than a complete picture. This can hardly be blamed on the author, of course, for a comprehensive account of the intellectual changes of the period has never yet been achieved, and it would necessarily be on a very different scale from this compact and helpful book.

Robin Briggs

A mighty view of species interaction

An Introduction to Population Ecology
by George Philip Hutchinson
Yale University Press, £12.60
ISBN 0 300 02155 0

In this work, Hutchinson has written two quite separate entities. The main text is a detailed, lucid, and comprehensive view of population ecology, but it is complemented by an historical and philosophical introduction, largely confined to footnotes. To have written such a work at all, after a research career spanning five decades, is a tribute to Hutchinson to be remarked upon.

Indeed, to say that the book is a masterpiece is not to carp. It is a masterpiece of lucid, formalized and popularized science, a school of ecology. The whole school of ecology. The whole school of ecology.

Of course, the layout is conventional for a book of its kind. The three chapters consider the processes in identified, species populations; births, deaths, and population growth in the real world, and more realistically, environments. Simple and numerous examples from plant, animal, and human populations sit easily side by side. Of course, in the real world, the single-species populations do not exist. Rather, they are one of many species in a community. The typical abstractions (some of which are hand-drawn) thus use to unravel the complexities of nature. Interactions with

other organisms dominate the remaining three chapters, in particular competition between species for limiting resources.

The quite outstanding feature of the book is the depth and perspective it brings to bear on the historical and literary roots of the subject. Hutchinson's scholarship is unmatched, and his grasp of original sources encyclopaedic. This alone makes the book indispensable for students of the history of ecology, as well as the professional population biologist. Particularly valuable is his ability to trace the history of important ideas; to map their original conception, their frequent neglect, eventual rediscovery and subsequent flowering. Such a perspective is rare in the closing pages of a textbook, and it is a pity that a scientist, obsessed with the "now" of his subject.

One of Hutchinson's stated aims is to write a book that would appeal not only to beginners in ecology but also to an occasional historian, economist, sociologist, and even a biologist in other areas of the science who may have wondered what people who talked about populations were trying to say. Although the inevitable mathematics is kept to a minimum, and there is an appendix which sketches the rudiments of the necessary calculus, this is not a book to be read lightly by somebody who has no understanding of mathematics, or indeed of basic genetics and statistics. Without these intellectual tools, important parts will not easily be understood. Nor should anybody reading it think that it provides a balanced

view of modern population biology. It does not. It presents Hutchinson's view; a mighty view, but only one way of doing the job. Hutchinson writes easily about mammals, birds, and his beloved lakes and ponds; he has very little to say about the terrestrial insects that really rule the world. Competition between species is, in his mind, and in the minds of his numerous students, and their students, the dominant force structuring communities of species; there is a growing number of us who would disagree. Theory is used to interpret patterns in nature; it is very rarely used to generate testable, refutable, or alternative hypotheses, and despite a vigorous defence in the closing pages, doubt whether ecologists can continue to pay lip service to Kuhn and Popper, and then ignore them. Some of the theory on predator-prey interactions, and the central problem of diversity and stability in ecological systems is actually misunderstood, and in one place simply wrong (confusing neutral oscillations and stable cycles—an esoteric, but fundamental point), and so on.

But really these are quibbles. An obsession with "now" despite a book places in its historical context, the growth of a vigorous and exciting branch of modern science. The fact that population biology has grown from being a tiny twig to a major limb owes much to the influence and scholarship of Evelyn Hutchinson. Anyone who reads this book cannot fail to understand why.

John Lawton

This week's reviewers

George Philip lectures in Latin American politics at the London School of Economics and his book *The Rise and Fall of the Peruvian Military Radicals 1968-1976* was published earlier this year; S. C. Rankin lectures in economics at the University of East Anglia; D. J. Richards is head of the department of Russian at Exeter University and has edited *The Penguin Book of Russian Short Stories* to appear shortly; William Seabrooke lectures in land management at Reading University; H. C. Smith lectures in history at Cambridge.

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Shipments of slaves

The Middle Passage: comparative studies in the Atlantic slave trade by Herbert S. Klein
Princeton University Press, £13.40
and £5.50
ISBN 0 691 03119 3 and 10064 0

The past decade has witnessed a revolution in the study of the Atlantic slave trade. Beginning with Philip Curtin's *The Atlantic Slave Trade: a consensus*, historians, demographers, and econometricians have devoted an increasing amount of attention to counting, classifying the trade which brought Africans to the New World. Herbert Klein has built on previous studies and taken them a step further: he has provided a quantitative as well as a comparative study of the trade.

Klein has been assiduous in his research. He has examined archives in Brazil, Portugal, Spain, France and England, and has made good use of port registers, shipping accounts in newspapers, and parliamentary papers. In addition, Klein has quantified many of his findings and put them together in a variety of useful graphs and tables. Since his book includes chapters on the trade to Rio de Janeiro, Jamaica, Virginia, and Cuba as well as more general studies of the French and Portuguese trades, he is able to be truly comparative.

For example, Klein concludes that the experiences of the European countries involved in the trade were surprisingly similar. By the middle of the eighteenth century, Europeans were using the same types of ships and carrying about the same number of slaves in each ship. They were feeding their captives a similar range of African staples and crossing the Atlantic in about the same time. Europeans were also finding that the mortality rate for Africans caught up in the trade was declining throughout the eighteenth and early nineteenth centuries.

Klein is at his best in exploring the reasons for this fall in the African death rate. He is unwilling to accept the traditional explanation that overcrowded conditions on board ship were the principal cause

for slave mortality. While there is doubt that slaves were tightly packed on the ships, Klein demonstrates that the number of slaves carried on each voyage do not correlate with mortality figures. Instead, he cites several other potential causes: the length of the voyages, the incidence of highly communicable diseases on route, and the part of origin for the Africans. Klein also speculates on the conditions in Africa which could have accounted for the mortality on the crossing: for example, local African disease patterns or food crises in specific regions.

Africans themselves might have had a significant influence on another aspect of the trade—the sexual composition of the migrating population. There was a heavy predominance of males among the slaves, planters in the Americas may not have wanted it that way. Klein suggests that the crucial position of women in African societies and the similarity in price and earning structure for male and female slave labour in the New World is evidence that Africans often controlled which slaves entered the trade.

Klein makes other contributions to our knowledge of the operation of the slave trade. Since he devotes considerable attention to the lesser known Portuguese trade to Angola to Rio de Janeiro, he is able to highlight and explain the usual role of the Portuguese merchants resident in Angola.

In a work of this breadth, there are perhaps bound to be problems. Since the majority of chapters have appeared elsewhere as articles, the most recent one curiously absent from the bibliography, there is a tendency to repeat some of the arguments. A few unfamiliar terms are explained only in the second third time they are used, and there are some important omissions from the bibliography. Nevertheless, *The Middle Passage* accomplishes what it sets out to do; it successfully treats the Atlantic slave trade from a comparative point of view. Herbert Klein is to be praised for this approach and also for raising further questions in this area which need answering.

David J. Heuman

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Anyone interested in Saint Nicholas, Santa Claus, or the life of legend will be fascinated by this eloquent work. Published November, £19.60.

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Polytechnics continued

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Salary scale: Senior Lecturer, £6,051 to £7,065/£7,572; Lecturer II, £4,101 to £5,558. The Polytechnic is a direct grant institution with an independent Board of Governors. It opened in 1971 and has a student population of some 7,100. It has extensive new purpose-built accommodation, including 750 residential places on the 11-acre campus overlooking the sea at Jordanstown, a pleasant and quiet residential area. There is a scheme of assistance with removal.

Further particulars and application forms which must be returned by November 20, may be obtained by telephoning Whitehead (0231) 65133, extension 2243, or by writing to: The Establishment Officer, Ulster Polytechnic, Shore Road, Newtownabbey, Co. Antrim BT37 9QQ.

BRIGHTON

POLYTECHNIC

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THE POLYTECHNIC OF WALES

DEPARTMENT OF URBAN ESTEATE MANAGEMENT AND QUANTITY SURVEYING

PRINCIPAL LECTURER

QUANTITY SURVEYING

Applications are invited for the post of Principal Lecturer in the Department of Urban Estate Management and Quantity Surveying. The successful candidate will be expected to teach and supervise students. Salary scale: £2,613 to £2,787.

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£7,047-£7,818 (Bar)-£8,844

The successful applicant will be responsible for the preparatory work leading to the establishment of the course for the proposed new Part II examination of The Law Society and for the administration of the course subsequent to its establishment. Applicants should possess an honours degree in law, have relevant teaching experience and be qualified solicitors.

Further details and form of application are available from The Assistant Director and Chief Administrative Officer, Trent Polytechnic, Burton Street, Nottingham. Closing date 13th November, 1978.

TRENT POLYTECHNIC NOTTINGHAM

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SENIOR LECTURER IN INDUSTRIAL DESIGN

Applications are invited for the above senior position to teach on the CNA BA (Honours) Industrial Design (Engineering) course.

Candidates should have experience in industry in the field of consumer products. Teaching experience an advantage. Salary: Senior Lecturer £5,051-£7,065 (work bar) £7,572. The maximum salary on appointment being £7,065.

Applications are invited for the post of Senior Lecturer in Industrial Design.

to teach on BA(Hons) Interior Design Course.

Applicants should possess relevant industrial or professional and teaching experience.

Salary: Senior Lecturer £5,051-£7,065 (work bar) £7,572. The maximum salary on appointment being £7,065.

Applications are invited for the post of Senior Lecturer in Interior Design.

to teach on BA(Hons) Interior Design Course.

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HATFIELD

THE HATFIELD POLYTECHNIC

SCHOOL OF ENGINEERING

TELECOMMUNICATIONS

LECTURER II

Applications are invited from graduates with a degree in Telecommunications Engineering, to join an established team in the School of Engineering.

Salary scale: Lecturer II, £4,101 to £5,558 (work bar) £7,572. The maximum salary on appointment being £7,065.

Applications are invited for the post of Lecturer II in Telecommunications Engineering.

to teach on BA(Hons) Telecommunications Engineering Course.

Applicants should possess relevant industrial or professional and teaching experience.

Salary: Senior Lecturer £5,051-£7,065 (work bar) £7,572. The maximum salary on appointment being £7,065.

Applications are invited for the post of Senior Lecturer in Telecommunications Engineering.

to teach on BA(Hons) Telecommunications Engineering Course.

Applicants should possess relevant industrial or professional and teaching experience.

Salary: Senior Lecturer £5,051-£7,065 (work bar) £7,572. The maximum salary on appointment being £7,065.

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to teach on BA(Hons) Telecommunications Engineering Course.

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to teach on BA(Hons) Telecommunications Engineering Course.

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Applications are invited for the post of Senior Lecturer in Telecommunications Engineering.

to teach on BA(Hons) Telecommunications Engineering Course.

Applicants should possess relevant industrial or professional and teaching experience.

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NEWCASTLE UPON TYNE

THE POLYTECHNIC

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PRINCIPAL LECTURER

Applications are invited from graduates with a degree in Graphic Design, to join an established team in the Department of Graphic Design.

Salary scale: Principal Lecturer, £6,051 to £7,065/£7,572. The maximum salary on appointment being £7,065.

Applications are invited for the post of Principal Lecturer in Graphic Design.

to teach on BA(Hons) Graphic Design Course.

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Salary: Senior Lect

Administration continued



PAISLEY COLLEGE

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Salary, £7,155

Applications are invited from persons with appropriate experience and qualifications for this senior post in the College Administration. The post carries responsibility for a wide range of duties in the academic administration of the College including the servicing of major Boards and Committees, personnel matters, student records, public relations and other services.

ADMINISTRATIVE ASSISTANT

Salary (A and P 2/3) £3,933 to £4,773

Applicants of graduate or equivalent level are invited to apply for the above post in the Academic Administration of the College. Duties will include the servicing of faculty Boards and Committees and other administrative responsibilities.

Application forms and further details available from the Establishment Section, PAISLEY COLLEGE OF TECHNOLOGY, High Street, Paisley PA1 2BE. (Tel. 041-587 1241.)

Closing date for return of completed forms 10 November, 1978.

Informal enquiries to J. M. Oswald, College Secretary, at Ext. 225.

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THE TEXTILE INSTITUTE

The international professional body for the textile industry invites applications for the following vacant posts.

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SALARY IN EXCESS OF £3,500. FURTHER DETAILS AND APPLICATION FORMS AVAILABLE FROM THE TEXTILE INSTITUTE, 10 BLACKFRIARS STREET, MANCHESTER M3 5DR. 061-634 8457.

Re-advertisement

DONCASTER AREA HEALTH AUTHORITY Senior Health Education Officer in Doncaster

Scale 9: £4,421 to £5,326

This challenging post, in the single-district Area of Doncaster, offers a health education officer a unique opportunity to increase health awareness and skills amongst the community, and to help and stimulate development and occupational growth in the various social health education.

Ideally, we need a person with a broad knowledge of health procedures and experience with adult groups in the community.

The post demands a person with: a knowledge of research procedures and an advantage but not essential.

However, we welcome applications from other professionals with the relevant experience who will be considered for appointment on the basis of a 6-month trial.

Further information and application forms are available from Dr. H. V. Wilson, Area Health Education Officer, Alnby House, 50, Alnby Lane, Doncaster, Doncaster DA1 1JL. Telephone: Doncaster 54661.

NB: Previous applicants for this post are not to send a further application form.

Closing date for completed applications 24th November, 1978.

Announcements

FILM, POLITICS AND PROPAGANDA, 1918-45

A conference organized by the Film Institute, London and the Imperial War Museum, 200, Strand, London WC2R 2EJ.

APRIL 19-20, 1979

For details apply to: Department of Film, Imperial War Museum, 200, Strand, London WC2R 2EJ.

Awards

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THE UNIVERSITY OF WARWICK is seeking applications for the post of Lecturer in Education.

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The University of Warwick is seeking applications for the post of Lecturer in Education.

EDUCATIONAL DEVELOPMENT AWARDS

Ministry of Overseas Development

This Ministry is offering 12 awards to enable the study of Education in developing countries and to enlarge the experience of those from Britain employed in this field. Awards are tenable from six months to two years, and may involve study for a higher degree or a period of attachment or an investigation. Thereafter employment will be expected in a related area, normally overseas. Applicants, preferably senior teachers or educationalists, aged 25-45, should have 5 years' working experience overseas in one of the fields:

1. The planning of education.
2. Administration of education including the running of schools.
3. The education and training of teachers.
4. Curriculum research and development.
5. Non-formal education and communication in the field of social education.
6. Technical education including industrial training and management development.

Closing date for receipt of applications for the academic year 1979/80: 1st March, 1979. Further details will be supplied on application to Room A.520, Ministry of Overseas Development, Eland House, Stag Place, London SW1E 6DH, quoting Ref. ED/201/234/01 (THES)



Colleges of Further Education



St Mary's College Strawberry Hill

ST. MARY'S COLLEGE

Strawberry Hill, Twickenham TW1 4BX

This is a Catholic College of Higher Education with 1,200 students (mixed). It offers Internal B.A., B.Sc., B.H. and B.Ed. Combined Degrees of London University with the award of Honours. Applications are invited from suitably qualified persons for the following appointments. Both appointments are available from 1st January 1979 but people not available until a later date will be considered.

LECTURER II/SENIOR LECTURER

with special reference to Diploma in the Education of Handicapped Children

The person appointed will have considerable experience in special schools or units and will have the opportunity to assist in the expansion of the Diploma Course.

LECTURER II SOCIOLOGY

The person appointed will have general duties within the Sociology Department but should be able to make a specialist contribution within the following areas:

Sociology of Religion; Sociology of Art and Literature; Social History; Social Anthropology; Social Theory or Social Policy.

The salary will be in accordance with Burnham Further Education Scale plus London Allowance. Further details of both the appointments are available from the Principal to whom applications (there are no official forms) should be sent together with the names of three referees to arrive no later than 10th November 1978.

WEST SUSSEX

INSTITUTE OF HIGHER EDUCATION

EDUCATION

TUTOR IN EDUCATION

Applications are invited from those with a background in education or allied fields for the post of Tutor in Education to develop courses in Teaching Studies.

Work in the first instance will be in the field of initial teacher training but will expand into other elements of the Institute's programme of development.

The appointment will be for two years in the first instance.

Salary: Lecturer II or Senior Lecturer (Burnham P.15).

Application form and further details may be obtained from the Secretary, The Institute of Higher Education, 100, West Sussex Road, Brighton BN1 9QJ. Tel: 01273 571111.

Further particulars may be obtained from the Secretary, The Institute of Higher Education, 100, West Sussex Road, Brighton BN1 9QJ. Tel: 01273 571111.

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Colleges and Institutes of Technology



School of Business Management Studies

LECTURER IN MANAGERIAL ECONOMICS

Qualifications: Degree in economics essential. Experience: Minimum of four years in industry or commerce, preferably with knowledge of systems analysis. Duties: Participation in teaching and development of first degree and postgraduate courses of business education. Placement according to experience and qualifications (£4,036-£7,636 per annum). Assistance with removal expenses. Further particulars from Chief Administrative Officer, Robert Gordon's Institute of Technology, Schoolhill, Aberdeen AB9 1FR. (0224 574511).

Dundee College of Technology

LECTURESHIP IN LAW

Applicants should be honours graduates in law and preferably have relevant professional experience. Teaching experience at undergraduate level would be an advantage and an active research interest is desirable. The duties of the person appointed will include teaching commercial, administrative and labour law on degree and other courses. Salary will be on the Lectureship A scale via £4,958 to £7,167 (band) - £7,698, with initial placing dependent upon approved previous experience. Financial assistance towards the cost of removal expenses may be payable.

Further particulars and application forms may be obtained from the Administrative Assistant (Establishment), Dundee College of Technology, Ball Street, Dundee DD1 1HG, to whom applications should be lodged by 17th November 1978.

Courses

LONDON

THE UNIVERSITY

INSTITUTE OF EDUCATION

M.A. IN EDUCATION IN URBAN AREAS

The Institute offers a course intended to meet the needs of teachers, administrators and other staff who have a particular interest in the education of children in urban areas.

The course is research oriented, and is designed to provide a sound basis for the study of urban education.

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General Vacancies continued

PART-TIME LAW TUTOR

In order to support our full-time staff, we are seeking to recruit a number of part-time law tutors. These are required both for manual and material preparation and to assist with lecturing. Please write or telephone for application form to:

CT Chart Tutors

Anne Harris, Chart Law Tutors Limited, Modern Court, Fleet Lane, London, EC4A 4EE. Tel: 01-248 3383 (24 hour answering service).

WASCAS

Western Australian Institute of Technology



DIRECTOR

The Council of the Institute invites applications and enquiries for the position of Director which will become vacant in December 1979 on the retirement of the current Director of the Institute, Dr. H. S. Williams.

The Director is the chief executive of the Institute and is responsible for academic and administrative leadership. Applicants should possess appropriate academic qualifications and administrative experience.

WAI is a multi-disciplinary institution. It offers a range of courses up to Master degree level within the Schools of Applied Science, Business and Administration, Engineering & Surveying, Health Sciences, Mining & Mineral Technology, Social Sciences, Teacher Education, The Arts & Design.

The Institute was established in 1967, and present enrolment is 11,000 students. In addition to the main Perth campus there are two others, at Kalgoorlie (part of the School of Mining & Mineral Technology) and at Mandurah (an agricultural college - part of the School of Applied Science).

Salary and allowances are comparable with those payable to the chief executives of other Australian tertiary institutions. Further information may be obtained from the Secretary of Council.

Applications and enquiries, which will be treated in confidence, should be addressed to: Hon. Mr. Justice A. J. Barbiell, Chairman of Council, Western Australian Institute of Technology, Hayman Road, South Bentley 8102, Western Australia. Applications should be submitted by 31st January, 1979.

Personal

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THE INSTITUTE OF SOCIAL STUDIES - THE HAGUE

Inviting applications for the post of

PROFESSOR IN DEVELOPMENT ECONOMICS

Candidates should have a thorough knowledge of the general theory of economic growth, development and planning and of the social and economic processes and policies in the Third World with special reference to issues of employment and distribution. In addition their publications and experience should indicate the ability to take a leading role in the further development of teaching and research in at least one of the following areas:

1. Role of the State Sector and Public Policies.
2. Comparative Development Strategies.
3. Economics and Statistics.

Candidates are expected to have a wide experience in teaching, research or consulting in developing countries and should be prepared to accept further short-term assignments in the Third World. Successful candidates will be able to attract projects and have a significant effect on younger staff members, both in terms of research and teaching.

The Institute of Social Studies carries out research on problems of Third World Development and offers teaching programmes at the Postgraduate and Master's level, conducted in the English language. Most students are graduates from developing countries. In accordance with Dutch University regulations, appointments are accompanied by a curriculum vitae and three references are invited by the Rector, Institute of Social Studies, Postbus 30, 2500 AB, The Hague, before December 3, 1978.



state university of groningen

University of Groningen (The Netherlands)
Department of Oral Biology

Applications are invited for the post of

reader in oral pathology

(gewoon lector in de pathologie van de mondholte)

(vac. nr. 781010/2570)

The reader will be responsible for the organization of undergraduate and postgraduate teaching in oral pathology. He is also expected to play an important part in the teaching and management of the department of Oral Biology and of the Subfaculty of Dentistry as a whole. He will be required to undertake research in oral pathology together with others working in related disciplines.

Applicants must hold an appropriate qualification as an oral pathologist, have experience in general interest in histopathology and should possess a Ph.D. or equivalent degree in Dentistry or Medicine.

The salary (gross amount) will be at least H.f. 5,909.- per month and at most H.f. 8,474.- per month.

Further particulars of the appointment may be obtained from the Chairman of the Application Committee, Prof. Dr. G. Boering, Dept. of Oral Surgery, Oostersingel 59, 9713 EZ Groningen, The Netherlands. Tel. 050-138123, ext. 2560.

Department of Oral Surgery
Applications are invited for the post of

reader in maxillofacial traumatology

(gewoon lector in de mondholtekunde in het bijzonder in de traumatologie van het aangezichtsskelet)

(vac. nr. 781011/2570)

The reader will be responsible for the organization of undergraduate and postgraduate teaching in maxillofacial traumatology. He is also expected to play an important part in the teaching, clinical work and management of the department of Oral Surgery as a whole, as well as the Subfaculty of Dentistry. He will be required to undertake clinical and laboratory research in maxillofacial traumatology together with others working in related disciplines.

Applicants must hold an appropriate qualification as an oral surgeon, have abroad experience in oral surgery with special interest in maxillofacial traumatology and should possess a Ph.D. or equivalent degree in Dentistry or Medicine.

The salary (gross amount) will be at least H.f. 5,909.- per month and at most H.f. 8,474.- per month.

Further particulars of the appointment may be obtained from the Chairman of Application Committee, Drs. O. H. Kerkstra, Antonius Deusinglaan 1, Groningen 9713 AV, The Netherlands. Tel. 050-117475.

applications:

Applications including curriculum vitae (5 copies of each) and the names and addresses of three referees, should be received within 3 weeks after the publication of this call by the Director of the Personnel Department, University of Groningen, Postbus 72, 9700 AB Groningen (The Netherlands).

Classified Advertisements

To advertise in *The THES* phone Lorraine Williams on 01-837 1234, Extn. 575.

The Times Higher Education Supplement

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Birzeit University

An independent Arab University in the Israeli-occupied West Bank of Jordan has the following openings for the academic year 1979/80

FACULTY OF ARTS: Education, English (Linguistics and TEFL), History (Middle East), Humanities, Psychology, Sociology, Anthropology, and Economics. **FACULTY OF COMMERCE AND ECONOMICS:** Management, Marketing, Finance, Accounting and Economics. **FACULTY OF SCIENCE:** Biology (Botany, Zoology), Chemistry (Inorganic and Physical), Mathematics (Algebra, Calculus and Mathematical Statistics), Physics (Experimental and Theoretical). English is the basic language of instruction and candidates should have a Ph.D. preferably with a master's degree with experience. Starting annual salary for Ph.D. is \$5,100. Optional summer teaching extra of \$1,000. Transportation allowance (15 per cent of salary). Transportation also provided. All applications should be addressed to: The Dean of the Faculty of Arts, Commerce and Economics, Birzeit University, Birzeit, West Bank, Israel.

Yours faithfully,
DR C. S. SMITH,
Secretary to the Social Science
Search Council.

**Letters for publication should
be sent on Tuesday morning at the
latest to the editor for review as no
other time can be arranged.**